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# East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2405

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USEFUL ROLE OF PRIVATE PLOT OUTLINED

Sofia POLITICHESKA AGITATSIYA in Bulgarian No 7, 1983 pp 23-29

[Article by Grigor Lilov, secretary of the Council on Agriculture of the Council of Ministers: "Development of Private Plots -- a Permanent Task"]

[Text] The accelerated intensive development of our economy created favorable conditions for the further strengthening of socialist agriculture. At its 1970 plenum the party's Central committee substantiated the need for a course leading to a higher level of agricultural concentration and specialization with the establishment of agroindustrial and industrial-agrarian complexes as a higher form of economic and social organization.

Since then reality proved the viability of these forms of organization and the accuracy of the chosen path. Today the agroindustrial and industrial-agrarian complexes are fully proving their advantages and providing extensive opportunities for the use of the latest industrial technologies in agriculture and rapidly increasing social labor productivity in this sector.

As a result of the care shown for agricultural concentration, specialization and intensive development, our present output is more than triple the prewar level. Our large-scale socialist agriculture constitutes a firm and inflexible base for meeting the needs of the population and the country and is providing substantial quantities of products for export.

Private plots account for a substantial share in the satisfaction of the country's need for agricultural products. They produce some 25 percent of the entire farm output, including 34 percent of the animal husbandry and 16 percent of plant growing products. The private plots raise 38 percent of all sheep, 47 percent of the poultry, 29 percent of the cows and 26 percent of the hogs. Bulgaria has a total of 1,066,000 cooperative farmers in agroindustrial complexes and about 160,000 pensioners and workers and employees working in other economic sectors, who have private plots and farm 12 percent of the arable land. That is why the BCP Central Committee pays exceptional attention to and cares for the comprehensive strengthening and development of private plots.

In our country private plots are socialist in nature. Todor Zhivkov, BCP Central Committee general secretary and Bulgarian People's Republic State Council chairman offers the following Marxist-Leninist definition of private plots: "The private plots are auxiliary farms of cooperative farmers, workers

and employees directly employed in public production and using no hired labor. They have and must have the features of a socialist private farm as an extension of the socialist production process."

Private plots covered three basic stages in their development in our country.

The first stage covered the period of socialist reconstruction of agriculture (cooperativization, establishment and strengthening cooperative labor farms). This was the stage of transition from capitalist to socialist production relations in agriculture. It was characterized by limiting the right to arable land and livestock mainly to cooperative farmers, workers and employees directly working in the cooperative farm. Membership and work in the cooperative was the criterion governing the size of land and head of cattle allowed for personal use. The amounts were specifically listed in the bylaws of the various cooperative farms, ranging from 3 decares in the plains to 5 decares in the mountain areas providing that a minimum of labor days determined by the general cooperative farm assembly had been worked. Two decares were allowed to workers and employees. During that period the private plots were considered farms in which the cooperative farmers could raise products they did not receive from the TKZS [Labor Cooperative Farm]. Historically, this was a necessary period. It helped to direct the efforts of the cooperative farmers to strengthening and increasing public farm output, relying mainly on the income from their labor participation in this production. That was the reason for which at that stage there was a certain arrest and, in the case of some crops and livestock, decline in private plot production.

The second stage covered the period of victorious socialist relations in the Bulgarian countryside. It was characterized mainly by accelerated agricultural production concentration and specialization. During that period (after 1970) the agroindustrial complexes were created as a new form of agricultural production concentration and management. Private plots were steadily developed and strengthened. Multiple steps were taken to stimulate the production and sales of farm produce to state purchasing organizations and at cooperative markets, as a result of which the share of the private plots in the overall volume of farm output and its marketability increased.

The third stage of private plot development began after 1977, when work was undertaken to apply the system of self-satisfaction of the population in the conurbation systems with basic farm commodities. Developed and applied under Comrade Todor Zhivkov's personal instructions, this system made it possible to launch a tremendous effort to increase production in public, auxiliary and private farms, the main prerequisite for which was to meet per capita consumption norms for meat, milk, fruits, vegetables, fresh-water fish and beans from the resources of the individual okrugs and conurbation systems.

In terms of the private plots, during that period the efforts of the BCP were concentrated along two main directions:

To create conditions for the maximal involvement of the population in farm production, particularly in raising labor-intensive crops and livestock;

To ensure the further close linkage between agroindustrial complexes and other agricultural organizations, on the one hand, and private plots, on the other, so that the latter may develop as the natural complement and extension of the former. Some negative aspects in this development were to be settled and gradually eliminated on this basis.

The Council of Ministers passed a number of laws to this effect, thus creating a legal base for making the private plots an important reserve of the population self-satisfaction system.

More specifically, what has been accomplished during the past 5 years?

Up to 2 decares of steep and small plots unsuitable for machine cultivation, which are now yielding good crops, were granted to some 500,000 workers, employees, pensioners and cooperative farmers in addition to their private plots. Such lands are located mainly in mountainous areas and are given to the population free of charge and with inheritance rights, providing that they are cultivated and farmed. The building of livestock premises and structures for rest and shelter not to exceed 20 square meters is allowed on such land. Furthermore, more than 300,000 citizens were granted 200 square meters each of irrigated areas to grow vegetables for their personal needs in the vicinity of large settlements and industrial centers.

The agroindustrial complexes and the other agricultural organizations were given full responsibility for the development and strengthening of the private plots. This is being accomplished exclusively through economic means. Starting with 1980, a unified plan was issued to the agroindustrial complexes on the sale of farm products from public and private farms. This creates an interest on the part of the public farms in maximally developing production in the private plots by granting the farmers the necessary land (even in excess of the size stipulated in the bylaws), seeds, planting materials, fertilizer, breeding and fattening livestock, organizing and providing services and taking plant production steps, providing draft cattle, farm machinery transportation, etc. By government decision the agroindustrial complexes alone have the right to contract for and purchase the products grown on private plots. The agroindustrial complexes may delegate this right to consumer cooperatives and other organizations. In all cases, however, the purchased products must be included in the unified APK [Agroindustrial Complex] plan. The conversion to a unified plan and making the APK responsible for the private plots contributed not only to their further strengthening but to proper control and elimination of some negative trends in their development, such as speculation, surreptitious use of hired labor forbidden by law and other adverse phenomena. Currently the APK determine on a contractual basis what farmers have the right to a certain amount of land, livestock and poultry, the amounts and conditions for purchasing their produce, etc. Frequently these problems are resolved after discussions by the collectives of APK brigades, livestock farms and branches.

Steps, essentially economic, are being taken for the output of the private plots to be sold primarily through the APK and other purchasing organizations. To this effect new incentive prices for crop and livestock products were approved in 1981. They were such as to encourage raising sheep and cows and growing labor intensive products (early and late vegetables, strawberries,

raspberries, table grapes, etc.). No tax is levied on income from goods sold the purchasing organizations. Bonuses in concentrated feeds at state prices are offered per purchased kilogram of meat, milk and eggs as follows: 4 kg for hogs, 2.5 kg for poultry, 2 kg for unweaned and weaned lambs (no charge), 1.5 kg for cattle, 2.5 kg for rabbits, 0.3 kg per liter of milk, 0.150 per egg, etc. Nearly 45 percent of all fodder used in the private plots come from the APK based on the adopted system of incentives in products in exchange for the purchased livestock products.

Furthermore, 5 kg of concentrated fodder per kilogram of live weight are allocated for raising pigs weighing under 20 kg. One decare in clover or natural meadow is allowed by the APK per raised cow or buffalo cow, etc.

On the other hand, in order to encourage farmers to sell their livestock products without receiving in exchange fodder from the state, higher purchase prices were introduced in 1982. This saved nearly 200,000 tons of feed grain in half a year alone.

The family and group contracting system has been extensively applied in raising some crops and animals, particularly in recent years. In virtually all parts of the country a high percentage of early tomatoes, cucumbers, potatoes, small or underproductive perennials and crops requiring extensive manual labor (strawberries, raspberries, vines, etc.) are contracted out by the APK to individual families or mechanizers. The APK provides land, fertilizer, seeds, and planting materials, carries out the main cultivation operations and plant protection measures and provides agrotechnical supervision, while the family does the manual work and cares for the cultivation and harvesting of the crops. In principle the entire crop is purchased by the APK at two distinct prices: basic -- according to average purchase prices of APK products, applicable to contracted quantities, and supplementary with a bonus for above-plan production. In animal husbandry family contracting is applied mainly in raising sheep and poultry for meat and laying hens. The family contracting method enables the APK to make use of additional manpower, employees, workers and pensioners in particular, in the production of items for which mechanization is insufficient or with low returns. This method also allows the faster utilization of technical progress in the private plots, which increases yields and creates adequate material incentive for the farmers.

We are currently seeking new and more efficient means for encouraging the population to sell its entire output from private plots through the APK and the state purchasing organizations. Nevertheless, a high share of the produce is still being sold on the open market at prices legally double those of the state. This particularly applies to early greenhouse vegetables and fruits and many people prefer to deal through the free market although income from such sales is taxed.

We see, therefore, that the private plots are an important resource for satisfying the steadily increasing population demand for farm products. Results, particularly during the last 6-7 year, confirm the correctness of the party line of turning the private plots into natural additions to the public farms and an extension of the socialist production process in agriculture.



The following data support this conclusion. In terms of basic production, the share of the private plots increased as follows between 1975 and 1982:

tomatoes.....	from 16.4 to 25.4 percent
peppers.....	" 20.3 to 35.7 "
onions.....	" 22.2 to 39.9 "
green onions.....	" 62.0 to 67.0 "
garlic.....	" 69.0 to 95.0 "

As we can see, the share of the private plots in terms of vegetables requiring a great deal of manual labor has become particularly high. The same applies to fruit growing, in which private plots account for 39 percent of total production. The volume of pears grown in private plots has increased from 56 percent in 1975 to 70.4 percentage today; plums, from 53 to 68 percent; strawberries, from 11.6 to 40.3 percent, etc.

Production of livestock goods has also increased. From 19 percent in 1975, today private plots account for 32 percent of the beef, and 56 percent of small animal meat. In 1982 private plots accounted for 56.5 percent of all eggs, 32 percent of the wool and 27 percent of the milk produced in the country.

Marketable private plot output is increasing considerably as well. Thus, for example, 27 percent of the [meat], 27 percent of the eggs and 12 percent of the milk are purchased from this agricultural sector. Furthermore, virtually all sales are made through the APK and the state purchasing organizations.

Consequently, private plots play an important role in the Bulgarian People's Republic in meeting the personal needs of the population for basic farm commodities and those of the national balances.

In this connection, comprehensive measures are being currently formulated for the accelerated application of technical progress and modern technologies in the private plots. Organized selective breeding aimed at improving breed lines and increasing average productivity is being applied in animal husbandry. Cell-powered batteries and industrial methods for reducing manual labor are being applied in broiler and egg production. A number of problems exist in terms of land cultivation, organized plant protection measures, transportation services and regularly supplying the farmers with fertilizers, chemicals, fodder and other raw and other materials. Specific programs have been formulated in order to resolve them, and steps are being taken to increase the efficiency and material interest in increasing private plot production.

Naturally, many problems await their solution in the area of private plots. That is why the BCP will continue to study and resolve them and will show continuing concern for and pay attention to the further all-round development of the private plots as an addition and an inseparable part of our large-scale socialist agriculture.

ASPECTS OF OUTDATED MANUAL LABOR DESCRIBED

Sofia POLITICHESKA AGITATSIYA in Bulgarian No 7, 1983 pp 35-39

[Article by Vekil Vanov, candidate of economic sciences: "Problems of Reducing the Use of Manual Labor"]

[Text] Skills are practiced on different technical levels and in a great variety in terms of the content and meaning of labor in the various material production activities and sectors. In their totality these differences are objectively determined by and proceed from the existing technical and economic division of labor in public production. The current problem is to determine the possibilities and reserves for the elimination of these differences.

The level of labor mechanization and automation also presumes differences in the ratio between mechanized and automated work, on the one hand, and machine-manual and manual work, on the other. The substantial difference in the ratio between the two groups and high employment in the manual labor group seriously raises the question of upgrading the technical standard of the production process and, on this basis, making positive changes in the professional structure and employment to the advantage of skills within the mechanized and automated work group. In this connection, however, we must note that manual labor cannot be entirely classified as heavy physical and unattractive, so that in the future efforts be made to attain the type of technical retooling which would eliminate it. The reason is that, along with physically heavy, harmful and unattractive manual labor in industry, construction and other material production sectors, some jobs require strictly manual labor which, however, demand high skills, is performed on a high intellectual level and provides a harmonious combination of light physical with mental work and activities.

The labor elements contained in intellectual manual skills such as, for instance, a certain level of education, skill and training for work in a specific professional area, technical standards, labor organization possibilities, etc., are enriched in the course of improvements in the technological production structure. In other words, upgrading the technical and economic production standard requires changes in the nature and content of this type of labor and broadens the area and scope of its application in the future.

The group of highly intellectual skills entirely based on manual physical labor could and should include production and material quality control; the work of laboratory technicians and precision machine specialists, motor and metal structure assembly workers, electricians and telephone exchange

assemblymen, electricians and electric power fitters assembling and repairing power machinery, manual fitters, etc. Essentially, these are skills which will become more important to the national economy as a result of technical progress and development as technical production standards rise.

A second groups should include skills equally entirely based on manual labor without being as highly intellectual as the first group but which require a certain professional (craft) mastery. The existence and significance of this skill is based on the fact that for the time being no technical solutions have been formulated for their mechanization. Examples in this case are the skills of plumbers, masons, tile makers, rug weavers, floor layers, etc.

The practical classification of skills by groups is based on their importance to the national economy and unquestionably reflects quality differences in the application of manual labor. However, it must not be absolutized from the viewpoint of quantitative characteristics and taken as a firmly established trend toward the steady increase in the number of workers practicing them. Thus, for instance, the importance of raw material, material and finished goods controllers is unquestionable. The number of such jobs (in industry alone more than 18,000 skilled and highly skilled workers and specialists) can be lowered by increasing and establishing a correlation among the quality standards of the three elements of the production process: labor tools, labor objects and manpower. Masonry is a highly labor-intensive skill (employing some 26,000 workers in industry and construction alone). As a type of activity it cannot be mechanized. However, employment in this profession can be reduced through the more extensive application of industrial methods in construction output by reducing the share of monolithic construction.

The third group includes jobs requiring physically hard, harmful, unattractive and unskilled (intellectually) manual labor which, as stipulated in the documents of the 12th party congress, must be substantially reduced during the 8th Five-Year Plan. This means that along with the enhancement of technological production standards, such jobs will gradually lose their practical significance. A number of examples can be cited in this connection about jobs which were widespread in our more distant or recent practice but which are currently finding decreasing application and range, and most of which are either disappearing or have entirely vanished.

As a result of the total mechanization of a number of manual operations the professions of ditch digger, lime quarriers, locomotive and ship stoker, etc. have virtually disappeared. High results have been achieved in mechanizing the work of flotation and separation workers, gaffers and tumblers of cables and winches, strippers in the timber extraction and processing industry, etc. The current number of people employed in such work is insignificant and no more than symbolic in the professional structure of such sectors.

Many unpromising and even long obsolete professions are still practiced in industry, construction and the other material production sectors despite successes achieved in reducing the share of manual labor. In many cases what concerns us is less the fact that they remain than the number of workers who practice them. In industry alone the following may be considered physically hard and totally manual unskilled jobs: loggers, with over 2,900 workers.



cart drivers, more than 1,650; ironmongers, 2,300; shoe and slipper makers, 9,100; general-purpose workers, 24,560; packers, 13,000; fillers and loaders, 7,140; brick firing workers, 1,360; haulers of raw materials, finished goods and waste, 8,600; loading and unloading workers, more than 18,000; cleaners, 21,000; manual and foot-pedal sewing workers, 18,700; ash (clinker) cleaners, etc. Physically hard workers in construction are concrete layers, more than 9,000; diggers, 12,360; ditch diggers, 1,600; edging workers, 1,230; loading and unloading workers, 2,750; general-purpose workers, 740, etc.

The solution to the problem of reducing and utilizing manual labor in material production sectors should be sought in the possibilities and basic directions in the development and accelerated practical use of the achievements of scientific and technical progress. Two main directions become available in this respect in terms of reducing physically hard and unskilled manual labor.

The first is related to the continuing trend toward reducing the practice, up to its total elimination of such unpromising and undereffective jobs through mechanization. On the basis of the opportunities and accomplishments of scientific and technical progress in our country and the other socialist countries, we may expect that in the near future technical solutions will become available for mechanizing the work of general-purpose workers, loaders, cleaners, carters, fillers and loaders, haulers of raw materials, materials and finished products and waste, diggers, etc.

The second is related to the preservation of manual jobs but after making substantial positive changes in the content and nature of their work.

From the viewpoint of the level of labor mechanization and automation two standards are applied within the same skill: work requiring heavy outlays of physical energy with low skill or use of mechanized labor tool involving minor physical stress and predominating mental work. Such skills are classified as "intercorresponding." Let us note in this connection skills typical of the second direction in the reduction and use of manual labor.

Two types of sewing machines are currently used in the sewing industry: with a manual or footdrive, and mechanical action, used in mechanized labor. Both types share the same operational principle. The only difference in the method used in activating them, is that muscular energy is replaced by an electric motor which actually determines the higher level of the nature and content of work in the profession. The application in the sewing industry of more efficient mechanically powered sewing machines will help not only to reduce manual labor in general but also to reduce the number of workers practicing this skill and to achieve positive changes in the content and nature of their work.

Steam-powered locomotive engines were being used in transportation and industry only until a few years ago. The locomotive engineers performed physical and unattractive manual labor. A radical modernization of the fleet was carried out in recent years: steam-driven locomotives were replaced by diesel and electric traction involving the use of highly mechanized instruments and apparatus. The modernization did not change the principle of operation of the engines and did not abolish the profession of locomotive engineer, but introduced a quality change in the content and nature of his work.

The same applies to the skills of blacksmiths using manual, mechanized or automated hammers and presses; loggers using manual and electric (motor) saws, etc. In industry, manual sewing workers and blacksmiths engaged in manual work alone account for some 23,600 people. This proves the existence of substantial reserves and opportunities in the second direction followed in reducing manual labor through mechanization.

In conclusion, the study of the content and nature of labor invested in the manual labor skills leads to the following general conclusions:

First, the topical nature of the problem of reducing and using manual labor requires, in formulating a comprehensive program which will include all manual labor jobs, to consider the nature and content of the labor invested, with a view to broadening the scope and realm of application of intellectual manual operations and activities and their subordination to the level reached in technical and economic production level, on the one hand, and the earmarking of specific measures for the qualitative reduction in the volume of heavy physical and low intellectual manual operations, on the other.

Second, given the existence of manpower shortages, the implementation of the program for reducing inefficient and unattractive heavy physical manual labor is of essential significance in lowering the stress in the balance of manpower resources and the further socioeconomic development of the country using essentially the influence of intensive economic growth factors.

Third, the problem of the utilization of manual labor should be approached on a comprehensive basis. The reduction and elimination of physically hard and unskilled manual labor means relieving workers engaged in such activities. All of this requires the enhancement of the intellectual level of the manpower whose labor will be assumed by mechanized labor tools. Consequently, the program for reducing manual labor should include measures aimed at upgrading the professional skill standards of the manpower -- the main productive force.

Editor's note: Reducing the amount of manual labor is one of the strategic tasks of the five-year plan and an important prerequisite for the all-round intensification of the national economy. The solution of this set of problems requires the extensive involvement of the labor collective and individual workers and specialists. This was the topic of the first session of the National Commission on the Organization and Management of the movement entitled "Reducing Manual Labor is the Shock Front of the 8th Five-Year Plan."

The National commission was set up by decision of the Council of Ministers and Bulgarian Trade Unions Central Council bureaus. Its main objective will be to guide and coordinate efforts on the territorial and sectorial aspects for mounting an offensive against manual, hard and unattractive work and creating the necessary prerequisites for intensive and efficient production.

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BULGARIA

EDITORIAL CALLS FOR HIGHER PRODUCTIVITY, QUALITY, DISCIPLINE

Sofia RABOTNICHESKO DELO in Bulgarian 23 Apr 83 p 1

[Editorial: "Quality, Discipline and Labor Productivity"]

[Text] The National Party Conference on production quality will be held in March 1984. Todor Zhivkov, BCP general secretary, will be the featured speaker. The conference marks the continuation of the valuable tradition of discussing at such high-level forums particularly important problems in the development of the party and the country with the participation of the entire people, which is one of the essential features of socialist democracy.

Placing on the agenda the problem of quality, in its broadest possible meaning and significance as a quality of labor and one of the most important prerequisites in implementing the resolutions of the 12th congress, is dictated by the objective social requirements of the present stage in building a developed socialist society. Today the dynamics and final success in the accelerated intensification of material output and all social activities and, hence, the further enhancement of the people's living standard largely depend on the level of labor productivity, quality and discipline.

Urgent efficient use must be made of the three elements of the production process: labor tools, labor objects and labor. In practical terms this means enhancing the material and technical standards of the contemporary scientific and technical revolution through the use of comprehensive automation and mechanization, progressive technologies and administrative decisions, applying top global and domestic achievements, the multiplication approach, etc.

In recent years the party has discussed and resolved such problems systematically, consistently, broadly and creatively. However, all past and future accomplishments would be incomplete if intensification in material production and all social activities fail to lower production costs per unit of output or sharply increase the quality of created material and spiritual values and consumer goods to the levels reached by the most advanced countries. Reality demands the production of goods competitive not only in terms of cost but high consumer qualities, meeting the steadily growing demands of our working people and our extensive participation in the international division of labor.

The party is also focusing on the major problem of enhancing the role of the labor collective and the individual working person as a concerned owner of socialist property. The ideological-educational work of the party and

sociopolitical organizations and the new economic approach and its mechanism are aimed at increasing individual interest and responsibility and combining personal, collective and public interests. The results of such efforts can only improve the more we take into consideration objective commodity-monetary relations and the marketplace mechanism. It is with this in mind that we must create the necessary conditions for the full application of the socialist principle of distribution based on the quantity and quality of invested labor. However, strong discipline is needed as well. Prices, profits, wages, moral incentives and even the official and public status of individuals must depend on labor productivity, discipline and quality.

That is why the slogan under which the National Party Conference and its preparations will take place is "Labor Productivity, Discipline and Quality -- and Quality, Discipline and Labor Productivity." Unquestionably, the solution of these three problems in their dialectical unity is the key to the implementation of the resolutions of the 12th BCP Congress.

The party has put these items on the agenda not because of serious shortcomings, problems or concern. During the socialist period, particularly after the April 1956 BCP Central Committee Plenum, we achieved remarkable successes. Economic growth rates are high and stable. Our people are living better and better. The market has become better supplied. Bulgaria is a respected and sought-after partner.

These successes are pleasing and unquestionable. However, they also trigger our dissatisfaction, for they are inconsistent with the great opportunities of the economy, which has a modern base, experienced cadres, traditions and the opportunities offered by socialist economic integration. At the same time the requirements based on the laws of development and the comprehensive demands of our working people and the requirements of our extensive participation in the international division of labor, which accounts for a large percentage of our national income, are rapidly increasing as well. We must work far more organizedly, with greater discipline and efficiency and produce material and spiritual values and goods exclusively on the world standards. No other measure should be applicable to our work, having decided to reach the peaks of human progress.

The reaching of this target depends on everyone -- communists and agrarians, Komsomol and Fatherland Front members, managers, specialists and workers. The prime condition is the creation of the type of political and social atmosphere which could enhance individual examples and contributions to the level of a behavioral standard, an atmosphere which would provide new powerful incentives to the nationwide struggle for the enhancement and assertion of the reputation of Bulgarian products. Our exigency can only be strict and uncompromising. The production of substandard goods can be assessed only as an antisocial action by anyone and everywhere: in material production and services, in the spiritual area and in sociopolitical work and management.

As is always the case in the implementation of strategic party decisions, unity of action between communists and agrarians, between the BCP and the BZNS, becomes an important factor for success. High responsibilities fall on the Fatherland Front, the Bulgarian Trade Unions, the Dimitrov Komsomol and



other social organizations in mobilizing the forces of millions of working people. The rapid reorganization of the work in the spirit of the new requirements largely depends on the competence of ministries, departments, economic organizations and enterprises, scientific, training and creative institutions and state organs and their ability to perform their obligations and functions.

Improving labor productivity and quality and strengthening discipline become the main topics, and the solution of these problems the imperative facing Bulgarian journalism, including the editors of RABOTNICHESKO DELO. This newspaper has focused on them its main sections, such as "Quality -- the Main Order of the Day and Primary Duty of Everyone -- a Nationwide Counterplan," and "Discipline Everywhere and by Everyone!" With the help of its many readers and authors and state, public, economic and party organs and organizations it will expand and deepen its propaganda and organizational activities through the following new basic initiative:

National Party Conference  
March 1984  
Action, Action and Only Action!

However, if the implementation of the BCP's socioeconomic strategy is to become the cause of the entire people and the fate of each labor collective and every working person this depends to the greatest extent on the party committees and organizations. The solution of the triple problem of labor productivity, discipline and quality must become the core of their organizational, political and educational work. It is particularly important for them to develop specific and effective efforts to turn the new requirements and responsibilities into convictions and motivations affecting the activities of every party member and working person in order to achieve high labor quality and results in labor collectives and on all levels. The various methods of mass-political and individual work with the people, the socialist competition and the various moral and material incentives are very potent. Skillfully used, they can contribute to the development of the type of political and moral atmosphere which will enhance the high reputation of Bulgarian products and the standard and efficiency of services. Intolerance of shortcomings and weaknesses, assertion of the new, popularization of progressive experience and exigency toward one and all in the implementation of the annual and five-year counterplans and in honor of the 40th anniversary of the socialist revolution and the National Party Conference complete the range of responsibilities entrusted to the party committees and organizations.

It is also natural for the final stage in the review of the primary party organizations and the forthcoming party accountability and election meetings and conferences, which will begin on 1 October 1983, to take place in this spirit and to contribute to the full mobilization of the efforts of the people in effectively resolving problems of labor productivity, discipline and quality. The implementation of the resolutions of the 12th congress will become even more specific and effective under the slogan formulated by Comrade Todor Zhivkov:

"Action, Action and Only action!"

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CSO: 2200/85

REPORT ON DEVELOPMENT OF NATIONAL ECONOMY IN 1982

Sofia STATISTICHESKI IZVESTIYA in Bulgarian No 4, 1982 pp iii-vii

[Excerpt] General Remarks

This publication comes out once a quarter and contains annual, quarterly and monthly statistical data on basic indicators characterizing the socioeconomic development of the Bulgarian People's Republic.

The program of statistical news encompasses 11 sections:

- I. Basic data on development of the national economy
- II. Living standard of the population
- III. Labor
- IV. Capital investment
- V. Industry
- VI. Agriculture
- VII. Transportation
- VIII. Communications
- IX. Internal trade and prices
- X. Tourism
- XI. Foreign trade

The data on all sectors are broken down by the organizational structure and composition of enterprises during the period in question. National economic sectors and sectors of industry are shown in conformity with the classification of the sectors of the national economy approved by Order No. 309 of 19 April 1979. Price indicators are published in prices of the year in question. The annual indices of industrial and agricultural output, of capital investment, of goods turnover and prices, of foreign trade and the monthly indices of industrial output are calculated from costs in comparable prices. Annual indices are calculated with 1970 as a base, while those for a period of less than a year are calculated with the corresponding period of the preceding year as a base.

The data on household income and expenditures come from a representative observation of household budgets.

## Explanation of abbreviations and symbols

0	Value less than half of the respective unit of measure that is used
-	No occurrence
.	Data lacking
PAK	Industrial-agrarian complex
APK	Agroindustrial complex

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#### Development of the National Economy in 1982

In conformity with the decisions of the 12th BCP Congress and the goals of the National Conference in October 1981, the efforts of labor collectives throughout the country during the second year of the Eighth Five-Year Plan were focused on implementation of party policy regarding the intensification of production and service activities. Workers nationwide expanded on an even wider basis socialist competition for higher efficiency and quality of work and, on this basis, for a further rise in the people's living standard.

In 1982 fulfillment and overfulfillment of state targets were achieved; firm trends of stable economic growth were maintained. Growth, as compared with 1981, of national income was 4 percent; of capital assets put into operation 2.2 percent; of the output of planned industry 4.6 percent; of the total output of agriculture 4.7 percent; of foreign trade 9.1 percent; of retail goods turnover 4.9 percent. The social productivity of labor provided almost the

entire increase of national income, three-quarters of which was used for a further rise in the people's living standard and for comprehensive satisfaction of the population's material, spiritual and social needs.

## Industry

Economic organizations and enterprises in industry overfulfilled state targets for the production and sale of output. State enterprises in all sectors of industry produced 4.7 percent more total industrial output than in 1981. The sectors that are heralds of technical progress and the basis for further accelerated intensification of the national economy increased their output at overtaking speed. The greatest increase was realized in the following: in enterprises of the electrical and electronics industry--13.1 percent; in the production of electric power and thermal energy--9.6 percent; in the chemical and rubber industry--6.7 percent; in the machine-building and metalworking industry--6.9 percent; in the coal industry--5.4 percent. In all okrugs, with the exception of Burgas and Tolbukhin, the output of state and cooperative industrial enterprises was higher. The following okrugs have achieved a higher increase than the nationwide average: Blagoevgrad 9.3 percent; Silistra 9.2 percent; Kyustendil 8.1 percent; Sofia 8.0 percent; Ruse 7.3 percent; Plovdiv 7.1 percent; Veliko Turnovo 6.8 percent; Pazardzhik and Shumen 6.7 percent; Pernik 6.4 percent etc.

The production of a number of basic industrial products was higher, as a result of which the country has been provided with considerably larger quantities of important producer goods for turning out commodities for the internal market and for export. Production was greater than in 1981 for the following: electric power 9.4 percent; coal 9.6 percent; conversion pigiron 3.2 percent; steel ingots 4.1 percent; electric motors 8.3 percent; power transformers 2.3 percent; motor trucks 14.8 percent; electrotelphers 1.2 percent; television sets 9.7 percent; nitrogen fertilizers 1.8 percent; cement 3.3 percent; paper 2.0 percent; cotton fabrics 3.0 percent; meat 2.9 percent; cheese 0.5 percent; vegetable oils 13.2 percent.

Labor productivity in state industrial enterprises increased 3.7 percent. This increase was greatest in enterprises of the electrical and electronics industry--9.8 percent; coal industry--6.0 percent; textile and knitwear industry--5.1 percent etc.

## Agriculture

Total agricultural output produced in 1982 exceeded 8.66 billion leva. As compared with 1981, the output of plant growing increased 6.4 percent and that of animal husbandry 3.0 percent. The production of basic agricultural crops increased. Of cereals, 9,957,000 tons were produced, or 15.3 percent more than in 1981. There was an increase in the production of such important industrial crops as sugar beets--33.6 percent; tobacco--12.3 percent; sunflower seed--9.3 percent. An increase was also achieved in the production of vegetables--1.3 percent; potatoes--15.5 percent; grapes--3.5 percent. Good results were achieved as well in animal husbandry. As compared with 1981, more of the following were produced: meat by slaughtered weight--4.7 percent; milk in

physical terms--5.0 percent; eggs 3.1 percent. Significant efforts were made to overcome difficulties in herd reproduction. In comparison with last year, agricultural organizations and sections had an 0.9 percent increase in the number of sheep and an 8.4 percent increase in the number of poultry. As a result of good care, the productivity of agricultural animals improved. The average milk yield per cow on feed increased from 3050 liters in 1981 to 3224 liters in 1982, while average egg yield per hen rose from 202 to 204 eggs. Some 5.9 percent more milk was purchased, 5.3 percent more meat, 1.8 percent more eggs.

### Capital Investment

Fulfillment of the 1982 investment program was subordinated to the task of the further building and improvement of the material and technical base of the national economy. For this purpose about 7 billion leva was invested, of which 38.9 percent was used for the modernization, reconstruction and expansion of existing production capacities. As compared with 1981, increased capital investment was made in the following sectors: construction, transportation, communications, housing and public utilities, personal services, science and scientific services, education, health care, social security, physical education, sports and tourism.

Capital assets worth 6,213,300,000 leva, or 6.0 percent more than in 1981, were put into operation.

### Transportation and Communications

Common-carrier transportation economic organizations and communication economic organizations fulfilled their annual targets in respect of basic indicators. As compared with 1981, rail transportation carried 3.0 percent more freight, and common-carrier motor transportation 2.0 percent more freight and 2.9 percent more passengers. Labor productivity was higher than in 1981 as follows: in rail transportation--0.8 percent; in common-carrier motor transportation--1.1 percent; in river transportation--13.9 percent; in air transportation--0.5 percent.

Better results were also achieved in respect of a number of basic technical and economic indicators. In rail transportation, freight-car turnaround was cut 2.32 hours, while section speed was increased 6 percent, scheduled speed 1.7 percent, and average gross weight per freight train 0.5 percent. The average load per ferryboat was increased 4.2 percent, while trip turnaround was speeded up 1 hour. Utilization of truck carrying capacity improved 2.6 percent.

In 1982 7.7 percent more revenues were realized from communication services than in 1981. Labor productivity in communication operations was 6.2 percent higher. Twenty-seven new PTT [posts, telegraphs and telephones] stations were built, of which 21 were in villages; 131,321 new telephone stations were installed, including 94,721 for home use.

## Living Standard and Internal Trade

The favorable results achieved in the development of the national economy created the necessary preconditions for a further rise in the people's living standard.

The average monthly wage of people employed in the national economy reached 197 leva. In industry it increased from 200 leva in 1981 to 205 in 1982, in rail transportation from 239 to 244 leva, and in construction from 224 to 228 leva.

There was an increase in the population's income from social consumption funds. Such income reached an average per capita of 734 leva, or 5.5 percent more than in 1981.

In keeping with the December program and the decisions of the Ruse conference, the production and importation of consumer goods continued to increase. The internal market was granted 6.5 percent more commodities than in 1981, and 4.8 percent more of locally made commodities alone. Further improvement was achieved in the structure of marketable commodities. A number of new assortments and high-quality products were offered to the trade network.

In 1982 4.9 percent more goods turnover was realized in retail trade than in 1981. In all okrugs, retail goods turnover was greater than that planned and realized in 1981. The trade network was expanded with new stores and public dining establishments. Services to the public improved. In comparison with 1981, greater quantities of meat, meat products, brynza [sheep's milk cheese], kashkaval [yellow cheese], butters and edible vegetable oils were sold. There was also an increase in the sales of sewn goods, knit outer and underwear, shoes, furniture, television sets, washing machines, household refrigerators etc. On this basis a further increase in the consumption of food products, clothing and shoes was made possible.

## Foreign Trade

In 1982 the country's participation in the international division of labor and, as a result, in socialist economic integration continued to develop. Our trade relations with the CEMA-member countries, and first of all with the USSR, were especially fruitful. New progress was made in the development of foreign trade. Foreign trade reached 21.6 billion foreign-exchange leva, or 9.1 percent more than in 1981. Exports grew 9.0 percent, and imports 9.1 percent. Trade with the socialist countries accounted for 74.8 percent of the country's total foreign trade. The trend towards an improvement of export structure continued. The share represented by machinery and equipment for production purposes reached 47.0 percent of total exports as against 45.8 percent in 1981. There were more exports of electrotelphers, radio telephones, soda ash, nitrogen fertilizers, carbamide etc., while more metalcutting machinery, coke, coal, iron ore etc. were imported.

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REPORT, COMMENT ON FULFILLMENT OF QUARTERLY PLAN

Sofia RABOTNICHESKO DELO in Bulgarian 24 Apr 83 pp 1, 2

[BTA news report: "Good Foundation for Further Progress--Announcement by Committee on Integrated Social Information System under the Council of Ministers on Results of Fulfillment of Integrated Plan for Country's Socioeconomic Development during First Quarter of 1983"]

[Text] During the first quarter of 1983 the efforts of labor collectives were focused on further implementation of the policy of general intensification of the national economy and elevation of the people's living standard.

The quarterly plan was fulfilled and overfulfilled in respect of the basic indicators characterizing efficiency, quality and scale of socioeconomic development. As compared with the first quarter of 1982, the social productivity of labor grew 5.4 percent and provided 80 percent of the net output increase in economic organizations. The commodity output of industry increased 6.2 percent. The economic organizations realized 7.8 percent more aggregate profit. A reduction of material expenditures above that targeted by plan was achieved.

Scientific-research and engineering-and-applications organizations and links continued to fulfill tasks incorporated in the plan for scientific and technical progress. The quarterly plan was overfulfilled and 924 developments were introduced into production. Some 315 products and 237 technologies were created. In industry 227 mechanized and automated flow lines were introduced. Forty-one autonomously functional automatic machines were introduced, and 145 workshops and production processes were fully mechanized and automated.

Industry

The economic organizations and enterprises of industry overfulfilled the plan for the production and sale of output. Commodity output amounted to nearly 9.3 billion leva, or 2.1 percent more than targeted in the plan. The volume of output increased more than 540 million leva over the first quarter of 1982.



# INCREASE OF INDUSTRIAL COMMODITY OUTPUT

Economic organizations within ministries and other departments	1st quarter 1983 as percentage of 1st quarter 1982
Power Supply	103.5
Chemical Industry	108.5
Metallurgy and Mineral Resources	102.8
Machine Building and Electronics	112.0
Light Industry	102.9
National Agroindustrial Union	104.8
Forests and Forest Industry	100.7
Construction and Architecture	103.8
Transportation	111.4
Communications	112.8
Internal Trade and Public Services	103.5
Central Cooperative Union	109.1
Capital City People's Council	110.8

All okrugs overfulfilled the plan for industrial commodity output. The following okrugs achieved a comparatively significant increase of production over the first quarter of 1982: Ruse, Mikhaylovgrad, Sofia Okrug, Shumen, Stara Zagora, Burgas, Razgrad.

The production of a number of basic industrial products was higher, thus providing significantly greater quantities of important producer goods, as well as commodities for the internal market and for exports

## INCREASE IN PRODUCTION OF CERTAIN BASIC INDUSTRIAL PRODUCTS

Industrial products	1st quarter 1983 as percentage of 1st quarter 1982
Electric power	107.3
Coal	100.2
Rolled ferrous metals	97.8
Steel tubes	100.8
Electrotelphers	104.3
Battery-operated trucks	109.5
Motor trucks	126.7
Nitrogen fertilizers	103.8
Soda ash	85.4
Polyvinyl chloride	137.1
Synthetic fibers and threads	96.4
Cement	101.1
Paper	101.3
Furniture	107.3
Cotton and cotton-type fabrics	102.0

INCREASE IN PRODUCTION OF CERTAIN BASIC INDUSTRIAL PRODUCTS  
(continued)

Industrial products	1st quarter 1983 as percentage of 1st quarter 1982
Woolen and woolen-type fabrics	100.8
Silk and silk-type fabrics	108.8
Shoes (excluding rubbers and houseslippers)	95.7
Meat	106.2
Meat products	112.3
Brynza [sheep's milk cheese]	113.4
Kashkaval [yellow cheese]	113.3

Of such important products for the national economy and for exports as the following, more were produced than targeted in the plan: electric power, industrial manipulators, lathes, tractors, railway cars, driving axles for the LIAZ [automobile made by Likino Bus Plant]-Madara, electrotelphers, battery-operated trucks, tire casings, cement, central processors, dial telephone exchanges, large reinforced-concrete panels, furniture, woolen and woolen-type fabrics, silk and silk-type fabrics, sewn goods, brynza, kashkaval, meat and meat products, tobacco products etc.

Individual economic organizations and enterprises failed to fulfill their plan for the production of the following: rolled ferrous metals, dry metallurgical coke, standard-unit machines, trucks, motor trucks, polyvinyl chloride, detergents, bricks, roof-tiles and ridge-tiles, phosphorus fertilizers, synthetic fibers and threads, pulp, paper, cotton fabrics, raw cowhides and pigskins, processed and semiprocessed foods, beer, processed cured tobacco, nonalcoholic beverages.

#### Capital Investment and Construction

Investments of 1,103,000,000 leva were made in the national economy, with the annual plan 15.4 percent fulfilled by the end of March. More than 74 percent of capital investment was concentrated in the physical production sectors. Machinery and equipment's share of the total volume of investment was 43.1 percent.

Construction and installation organizations completed construction worth 769.5 million leva, which is 9.1 percent more than in the same 1982 period. The quarterly construction program was overfulfilled 1.8 percent. Comparatively more significant overfulfillment was achieved by construction and installation organizations in the Ministry of Construction and Architecture--5.4 percent, Ministry of Communications--13.9 percent and National Agroindustrial Union--15.8 percent.

Completed construction of underway projects amounted to 476.3 million leva, with the plan overfulfilled 2.1 percent.

The construction program of projects of special importance for the national economy was overfulfilled 7.8 percent, while for some of them--such as the atomic power plant in the city of Kozloduy (five and six reactors), the Petrochemical Combine in the city of Burgas, the L. I. Brezhnev SMK [Construction and Installation Combine], the Steel Foundry in the city of Rakovski, the heavy machine building plants in the city of Ruse and the city of Radomir--overfulfillment was significantly higher.

The completed construction and installation work on the main projects for the production of consumer goods was more than that targeted in the plan.

By the end of March capital assets worth 400.5 million leva were put into operation, but the plan fell 2.5 percent short of fulfillment. The economic organizations within the ministries of the chemical industry and metallurgy and mineral resources failed to assure complete fulfillment of the program for putting capital assets into operation.

More capital assets than targeted were put into operation within the ministries of power supply, machine building and electronics, light industry, construction and architecture, transportation, National Agroindustrial Union, okrug people's councils as a whole etc.

#### Agriculture

Agricultural organizations made better preparations for spring field work than last year. Spring planting began earlier and the quality of the work done was better. By 1 April considerably larger tracts had been planted than last year in alfalfa, sugar beets, onions, green peas, oats.

Fall seedings of wheat and barley wintered well in most regions of the country and were nourished with chemical fertilizers.

Insufficient moisture reserves in the soil and negligible precipitation during the winter and spring made it imperative in many regions of the country to lay on irrigation of the winter wheat, speed up preparations for mass irrigation of spring crops, undertake special measures to provide additional sources of water, and employ improved irrigation techniques on large tracts.

Favorable results were achieved in animal husbandry. The number of sheep, swine and poultry on all categories of farms was greater than a year ago.

#### GROWTH IN NUMBER OF AGRICULTURAL ANIMALS

Species of animals	Number on 1 Apr 83 as a percentage of number on 1 Apr 82
Cattle, including cows	98.8 98.8
Sheep	100.04
Swine	102.4
Poultry	104.2



The decline of cattle in 1982 was not overcome and a decline in cows occurred in the quarter. The number of cattle as of 1 April 1983 was less than on the same date in 1982 in agricultural organizations in the following okrugs: Mikhaylovgrad, Kurdzhali, Kyustendil, Vratsa, Ruse, Vidin; and the number of cows was lower as of the same date in Varna, Vidin, Mikhaylovgrad and Stara Zagora okrugs.

There was an increase in the production of animal husbandry products.

More of the following was sold than in the first quarter of 1982: beef cattle and poultry--8.5 percent; milk--11.8 percent; eggs--22.6 percent; early vegetables over 1.5 times more.

#### Transportation and Communications

Common-carrier transportation economic organizations carried 7.5 million more tons, or 7.6 percent more freight than in the first quarter of 1982, with 2.5 percent more freight carried by rail transportation and 8.8 percent more by common-carrier motor transportation. Also 1.8 percent more passengers were carried.

For fuller satisfaction of the transportation needs of the conurbation systems of the fourth and fifth functional type, 65 new bus lines with more than 500 runs per day were opened. Adherence to timetable by express and passenger trains and by buses was improved.

The quarterly plan for revenues from communication services was overfulfilled 1.9 percent. Some 9.5 percent more revenues were realized than in the first quarter of 1982.

The postal system was expanded with eight new PTT [posts, telegraphs, telephones] stations, including eight in villages. Some 36,190 new telephone sets were installed; 69 new telex stations were opened; three radio transmitters and eight television retransmitters went into operation.

#### Living Standard of Population

Likewise during the first quarter of 1983 the projected measures for raising the people's living standard and for more fully satisfying their material and spiritual needs continued to be implemented.

On the basis mainly of higher labor productivity and the increase of social production, the average wage of manual and office workers in economic organizations (excluding agriculture) reached 584 leva, which is 2.4 percent more than in the first quarter of 1982.

In keeping with the concepts and requirements of the October (1981) National Conference, the production of consumer goods was increased, with industry providing the domestic market with commodities worth nearly 250 million leva above target. Five percent more goods--Bulgarian made and imported--than in the first quarter of 1982 were made available as marketable commodities.

The increased marketable commodities, the constant improvement of the material and technical base of trade and the expansion of modern forms of trading services enabled retail goods turnover to reach 3,053,000,000 leva and to exceed targeted sales for the quarter by 1.2 percent. The realized retail goods turnover exceeded the volume attained during the first quarter of 1982 by 4.7 percent, with more commodities sold in all okrugs.

More of the following were sold than in the first quarter of 1982: meat--1.8 percent; meat products--4.1 percent; milk--3.2 percent; brynza--1.2 percent; kashkaval--8.9 percent; eggs--5.7 percent; sugar--6.0 percent; fresh fruits--2.7 percent; fresh vegetables--5.8 percent.

Sales of a number of important nonfood products were higher.

However, the population's needs of pork, nonperishable sausages, electric boilers, automatic washing machines, electric cookstoves etc. were not fully satisfied.

In comparison with the first quarter of 1982 public services increased 10.5 percent. There were significant increases in the following services: radio and television maintenance and repair--13.3 percent; maintenance and repair of household appliances--12.9 percent; maintenance and repair of motor transport facilities--36.6 percent; drycleaning--11.5 percent; construction and repair services--11.5 percent etc.

Some 5437 housing units were finished and delivered for occupancy by the population.

The results achieved during the first quarter are a good foundation for further successful fulfillment of the 1983 plan and of the tasks set by the December (1982) plenum of the BCP Central Committee.

#### Heartening Results

The increase in aggregate profit was 7.8 percent; material expenditures were cut more than targeted in the plan. This is solid proof of what a real force the principles of the new economic approach and its mechanism are.

The persistent and consistent effort to introduce scientific and technical progress into practice is the foundation for the success that has been recorded. What was targeted in the quarterly programs has been overfulfilled. In industry 227 mechanized and automated flow lines were introduced; full mechanization and automation made their way into 145 workshops and production processes. And it is logical that the economic organizations have produced 2.1 percent more commodity output than targeted.

The structure-determining sectors are developing stably and dynamically. The rates of productivity growth in machine building and electronics, the chemical industry, transportation and communication are higher than those achieved in the first quarter of 1982. These results are inconceivable without the main thing: highly organized, disciplined and good-quality labor.

Where is what we have achieved reflected? There is one answer--in the main strategic goal of party policy: the further elevation of the living standard. From this perspective the quarter will leave a good mark behind it, too: the average wage and marketable commodities are higher, the turnover that was realized was above plan, there were more public services and they were of higher quality.

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## LOCAL OFFICIAL DESCRIBES REASONS FOR LOW QUALITY SERVICES

Sofia RABOTNICHESKO DELO in Bulgarian 18 Apr 83 pp 1, 4

[Article by Candidate of Economic Sciences Boris Zhivkov, chief director of the Economic Directorate for Local Industry and Consumer Services in Vidin: "Half-Measures Do Not Cure an Old Ailment"]

[Text] As the director of the Economic Directorate for Local Industry and Consumer Services in the city of Vidin, I have been the recipient of complaints of poor quality product and have submitted many protests against the raw products, materials, machinery and equipment supplied to us by various organizations with poor quality or with the nonobservance of contractual dates.

Without judging the responsibility and blame of our divisions for the quality of the product produced by them I would like to share my conclusions and proposals.

From poor quality raw products and materials, it is impossible to produce high quality goods and services for the public. Here is how we find ourselves in terms of this question: of all the raw products and materials which the divisions of the directorate receive, only 15-20 percent are of first and second quality. The remaining 85-90 percent are of poor quality or are below standard. For example, in 1982, the divisions in the system of our directorate received 500,000 decimeters<sup>2</sup> of upper leathers from cowhide to manufacture footwear, both ready-made and individually ordered. Of this amount, 300,000 decimeters<sup>2</sup> were below standard, 50,000 were fourth quality, 50,000 were fifth quality and 100,000 sixth quality. The producer and supplier of these leathers are the divisions from the system of the Pirin PTO [Production-Trade Trust].

The quality of the goods and services produced for the public in our system is particularly strongly influenced by the rhythmical delivery of high quality parts and assemblies for repairing the various articles of the citizens as well as the prompt and rhythmical placing of orders on the domestic and international market. These questions are also being poorly solved for us. Mlad Tekhnik [Junior Technician, a firm] is obliged to supply the necessary parts and assemblies to the enterprises repairing timepieces and various articles generally termed complex household appliances. The delivery is made on the basis of a free bilateral agreement. However, it is from here that the tragedy starts. For example, the Miko Ninov industrial enterprise which is a division from the system of our directorate in 1982 proposed a contract to Mlad Tekhnik for

delivering 1,390 various spare parts, pieces and assemblies of seven types. However, the supplier accepted to deliver only 40 of two types. Since the agreement is free and bilateral, we do not have any opportunity to influence the supplier except through the fruits of the flora and fauna of Vidin Okrug. With such a situation, the repair of complicated household appliances is carried out poorly or is delayed for months.

For a long time, the leaders of local industry and consumer services have been following in the path of a torturous and painfully exhaustive infamous circle over...the technological level of production. Publically, no one underestimates the importance of this problem and its significance for high quality products. The instructions which contain the strategy and tactics for solving the problem are clear and categoric. But our practice in this regard is still moving at a crawl. Here is a concrete example. Specialized sewing machines, buttonholers, pressing equipment and other machinery convenient for local industry are still a rarity. We do not even have enough suitable sewing machine needles and without this high quality garments are impossible. The textile, woodworking, metal cutting, press forging and plastics machinery and equipment used by the divisions of local industry require a great deal of manual labor in order to achieve a more or less excellent quality level of the products produced by them. Our enterprises have machinery from the end of the last century. We must produce high quality modern goods from them and from average quality materials.

All that has been said up to this point has been put forward with pain and concern. Our pain comes from the fact that for a long time the questions which we have already mentioned have been discussed officially and unofficially at various places and by various bodies and institutions. Many initiatives on these questions have been taken up and then forgotten. But to our great regret, the question of product quality as well as the quality of many other human activities has still not obtained the desired resolution.

Our concern comes from the fact that we have allowed ourselves to name the colleagues and bodies with which in the future our relationships will be founded on a basis of a free bilateral agreement. And this involves the corresponding risks. Certainly, for us the people of local industry.

For all that we have stated up to this point, we would propose:

- 1) The prices for raw products and materials should be substantially differentiated depending upon their quality classification. Here the range of the price difference should increase progressively, depending upon their quality. If an enterprise has produced below standard materials and raw products and realizes a profit, the entire amount of profit should be turned over to the state budget.

- 2) To change the procedures for the organization, formation and control of wages whereby the leaders of any levels would not be paid bonuses or any other compensation for various reasons when the production units which they manage have been allowed to produce poor quality products.

3) The wage rates for workers producing poor quality products are to be reduced, respectively, by 50 percent for the below-standard products. For the remaining products which are within the limits of the approved quality grades, wage rates are to be differentiated.

4) A system should be established for forming the wage fund and individual gross wages whereby around 15-20 percent of their amount would be dependent solely on the quality indicator.

5) Planning procedures would be supplemented so that the indicator of the obligatory physical range would include the quantity and type of spare parts needed for the repairing of various articles, implements of labor or structures including private or publically owned. The fulfillment of this indicator rhythmically over the months would be a required condition for paying any type of bonuses, compensation and above-norm remuneration.

6) The Ministry of Machine Building and Electronics, with the approval of the Ministry of Internal Trade and Services, is to continue to work out a national program for the domestic production and importing of machinery, equipment and installations essential to raise the technological level of the local industry divisions producing goods and services for the public to a point meeting the standard given by Comrade Todor Zhivkov at the Ruse Conference.

7) To accelerate the incorporation in the established mechanism of the idea given by Comrade Todor Zhivkov at the Ruse Conference of using the foreign exchange produced in the system of local industry by its divisions to import production equipment.

The quality of work must become a vital necessity for all Bulgarian citizens. Society can influence the accelerating of this process by every possible means through persuasion and coercion, including indoctrinational, administrative, economic and punitive.

10272

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ECONOMY SUFFERS FROM LACK OF TRADE WITH WEST

Rotterdam NRC HANDELSBLAD in Dutch 30 Apr 83 p 4

[Article by Anna Sandor: "Economic Orientation Toward Moscow Now Being Avenged: Prague Has Gambled Poorly for 15 Years"]

[Text] The ever prestigious Czechoslovak economy is losing ground, in the world economy as well as within CEMA. The economy is not growing, investments are falling off, and the economic system is distinguished by rigidity.

No wonder that for the first time in 15 years the implementation of changes is being considered in Prague.

According to the economic newspaper HOSPODARSKE NOVINY, Czechoslovakia accounted for 1.5 percent of all world trade in 1965. In 1980, this figure was only 0.8 percent. Premier Strougal complained recently in the parliament itself that the figure had fallen to 0.7 percent last year.

Even more serious is the decline in CEMA. Previously, Czechoslovakia occupied an extraordinarily favorable position within the East European organization. Its products were always very much in demand, and Czechoslovakia was the most important exporter of machines and technology to the GDR.

In 1965, Prague's share of East European trade amounted to 14 percent, last year only 8 percent. Economic growth has dwindled step by step during the last 5 years, and now the plan hardly dares to prescribe any growth at all. Investments are not only no longer growing, they are even decreasing, this year by 1.5 percent.

A heavy burden of repayment in relations with the West cannot be the reason because since the reform policy of 1968 was put to rest, Prague has followed a restrained economic course and consequently drawn little credit from the West. Caution prohibited such credits to those in power in Prague, just as it stood in the way of changes in the economic mechanism or of important technological imports from the West. The result of this overly cautious course was already visible at the end of the 1970's and after Moscow had announced several small economic reforms during the second half of 1979, Prague moved toward several renovations in January 1981.

## Experiment

Thus, by way of an experiment, a sort of decentralization was carried out in 150 factories, with the intention of extending it later. Higher salaries were promised for higher production. But according to Premier Strougal, these measures have not only not been carried out during the last 2 years, they have even been sabotaged. "The world will not adapt itself to us, that teaches us reality very quickly," as was concluded last week at an economic conference in Prague.

This small sentence symbolizes a new voice, a new economic mentality, at least in economist circles.

Until recently, poor economic performance was blamed exclusively on the worsened world economy--read: the West. Naturally, the world economy plays a role, but the cause of the worsening lay mostly with Moscow.

Prague receives from the Soviet Union less and less energy which is more and more expensive. Forty percent of Czechoslovak energy needs are covered by the Soviet Union. However, Soviet deliveries decreased 17 percent last year which led to a strong decline in very important petrochemical exports.

The worsening in heavy industry, the country's most important export industry, is primarily its own fault. Last year Prague exported 20 to 25 percent fewer machines to its most important partners in the Third World: Iran, Iraq, Libya and Syria. The reason is simple: the products can no longer compete. Czechoslovak industry still uses two to three times more energy and raw materials per production unit than the West, and this drives the price up. In addition, little use is made of new technology. Prague buys too little and does not take part to a great extent in cooperative projects with the West, the preeminent means of coming by new technology.

Now that the bill for imports can no longer be paid with machines, Prague must try to export other products, such as food and consumer goods. And that will be at the expense of the nation's own level of well-being.

## Breakthrough

A breakthrough was registered at the conference in Prague when poor management and the rigid economic mechanism were also named as causes of the slump. Economists now dare to state the Czechoslovakia has fallen far behind within East Europe in the modernization of the economic mechanism. In economic circles--and only three--a new generation has grown up in the last 15 years which asks for sensible measures. Economic speculations are coming under consideration. Things are being discussed again, the introduction of world market prices for example--something that has been going on in Hungary for several years--or the halting of state subsidies. Small producers ("garden friends," who grow something on private ground) are again being called useful members of society, and the supremacy of state property is on the wane, although it remains to be seen whether anything concrete will follow the discussions.



At any rate, Prague is now clearly sorry that it did not intensively take part in the blooming of East-West trade in the early 1970's, this in view of the fact that Czechoslovakia is the only East European country with two Western neighbors. It chose Moscow and regrets the choice. Even so, this can only be heard cautiously—and not be seen.

12271

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## USE OF SECONDARY ENERGY SOURCES ENCOURAGED

East Berlin PRESSE-INFORMATIONEN in German No 44, 15 Apr 83 pp 2-3

[Article by Dr Jochen Kratzke, state secretary, Ministry for Coal and Energy: "Secondary Energy--An Important Reserve to Meet Energy Requirements]

[Text] In every transformation of energy--such as the production of pressed coal and coke from raw coal, vaporization and low-temperature carbonization of solid fuels, or the production of electric energy and heat--energy losses occur, be it in the form of fuel gas or cooling water of the power plant, of condenser heat in pressed coal plants, or of unburned residue in ashes and by products. If it is technically feasible and economically justifiable to utilize this unused energy, then we call it secondary energy.

Exploitation of such secondary energy reserves is of great economic importance. For instance, they can be utilized to meet the requirements for heating without having to harness and transform energy from nature. Fuels already used in the energy cycle undergo more complete utilization. Naturally, this entails expenditures for installations and equipment. It has been proven, however, that in many cases, the necessary economic expenditure requires only about one-third of the funds which would have to be spent for an extensive expansion of energy production and transformation. To secure the growing stepup in performance without additional energy, therefore, includes increased use of secondary energy. Its utilization agrees with the economic requirement to make more out of what is available. Simultaneously, this has beneficial results for the environment.

### Growing Demands on Scientific-Technological Performance

The currently usable secondary energy potential of the coal and energy industry amounts to an energy equivalent of approximately 12 million tons of raw ligneous coal. In 1982, about 54 percent of it was utilized. In 1983, the utilization rate is to rise to 66 percent, and is to reach at least 70 percent in 1984. It must be recognized that the secondary energy potential is not a static quantity but expands, depending on new technical solutions to its utilization. For this reason, it must be constantly analyzed and redefined. From this, arise growing demands on scientific-technological performance.

At present, a trend-setting installation for the utilization of secondary energy is being tested in the pressed coal plant at Witznitz. Through it, carbon particles from the wet dust separation process are regained, which are added to the raw ligneous coal in power plants. It is expected that, in future, an amount of [carbon] dust can be salvaged which corresponds to an equivalent of 22,000 tons of raw ligneous coal.

Process analysis has been shown to be a valuable aid in discovering secondary energy reserves. In the Graefenhain openpit mine of the People's Ligneous Coal Combine Senftenberg, for example, the results of such an analysis of a bucket-conveyor dredge, of the type ES 3150, showed possibilities for using the cooling air of the bucket chain-drive motor in heating the switch gears of the equipment, which saves about 20 kW of direct electric heating. If this solution proves itself, it is to be applied to other equipment of the same type, and its use for other installations and equipment is to be tested.

#### Priority Tasks

In view of these experiences and results, it will be a matter of priority in the coal and energy industry during the next few years to make increased use of the condenser heat in pressed coal plants for supplying heat to apartments and industrial users, as well as to greenhouses. Many tests have been concluded and large-scale technical application is systematically being prepared.

Greater use of utilizable cooling water for intensive fish breeding, heating of greenhouses and, in combination with heat pumps, for indoor heating are also concerned. In 1983, employment of more than 90 heat pumps in the coal and energy industry is planned. The heat created in the transformation of electric energy must be used much more extensively for indoor heating and hot water preparation. In 1982, about 50 installations were placed in transformer substations.

Finally, the flue heat from electric power plants, heating power plants and heating stations must be better utilized, especially through application of the desulfurization process of flue gas, developed by the Energy Institute and the Center for Efficient Energy Use. But more intensive work must also go into complete utilization of existing fuel-containing solid byproducts, such as sump products, slag coal, furnace ashes of large-scale steam producers and ashes containing tar from vaporization.

Decisive for the speed and efficiency of expanded use of this secondary energy potential is the management and planning of these tasks. This presupposes that every manager must know where, in his area, this potential exists, and that he possess conceptual ideas for long-term utilization. Among other things, this also includes close cooperation with local consumers. The development of such concepts is being elaborated at present.

9917

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'FLEXIBLE AUTOMATION' TRENDS IN PRODUCTION CHANGES ANALYZED

East Berlin WIRTSCHAFTSWISSENSCHAFT in German Vol 31 No 1, Jan 83 (signed to press 15 Nov 82) pp 15-30

[Article by Prof Dr Gudrun Langendorf and Dr Harry Nick, economists, deputy director and research program chiefs, respectively, Institute for Political Economy of Socialism, Academy of Social Sciences, SED Central Committee: "Trends in the Qualitative Changes of the Instruments of Labor"]

[Text] Starting out from the significance of the scientific-technological progress for economic growth, the authors determine that in the overlapping areas of application of micro-electronics, robot technology, modern control technology, etc., considerable changes reveal themselves in the material-technological base and that in this area, techniques combine in complex and highly effective technological solutions, that is, they combine to form automated machine systems. The fundamental direction in the development of these modern automated systems becomes apparent in, among other phenomena, the growing complexity and flexibility of technical systems and the new combination of objective and subjective factors in the way these machine systems function. The authors deal in particular with the qualitatively new role played by organization and technology in the utilization of economic effects which, objectively, constitute the foundation of automation. In this context they explain the internal optimization in a flexible, process-oriented automation, the purpose-oriented shaping of the surroundings, as well as the step-by-step construction of automated systems which require--as a prerequisite for a high degree of their effectiveness--rational organizational solutions.

There are two meanings to the statement made at the 10th Party Congress that "the potentials of the scientific-technological revolution have become the main reserve for the future increase of performances and for the effectiveness of our national economy".<sup>1</sup>

First, during the seventies, very far-reaching and persistent changes took place--as has also been apparent in the last few years--in the situation of our resources, which cause considerable qualitative changes in the overall

process of socialist reproduction and which set new qualitative standards for the effective employment of all economic resources.

--For the first time rates of economies can be achieved in the use of energy and materials which approximate the rates of economic growth and reduce the share of consumption in the production process to the extent of yielding an additional growth in the national income.

--For the first time the achievement of a growing ratio of product per unit of production fund in the average of the national economy has become the indispensable precondition for the achievement of growth objectives.

--For the first time the necessity exists to create preconditions for new jobs by abolishing about the same number of jobs in industry.

The type of expanded reproduction, which is to meet the needs of present and future conditions of the economy, is characterized particularly by the fact that it must not only be labor-saving--to a greater extent than in the past--but also energy-saving and materials-saving as well as fund-saving. This means also that there is considerably less room for processes of substitution, in the sense that, for instance, savings of human labor can be compensated for by an additional expenditure of concrete labor per product, and that a higher level of product quality can be gained with an increased outlay of money. What is needed are technical, technological and organizational solutions, which will enable tangible progress simultaneously in all directions of economic progress. These new demands and standards of economic progress are met, to a high degree, precisely by the new developments in modern technology.

It is no doubt a remarkable coincidence that at the time when there is a distinct deterioration in the situation of our resources, the possibilities to achieve economic growth through scientific-technological progress have noticeably increased, and that the technical revolution, precisely at this time, is receiving new and powerful impetus. This is the second objective reason for the fact that the scientific-technological revolution has now directly become the main reserve for a continued increase in our economic performances. Apparently, one of the noblest tasks of economic research consists in the careful exploration of the effective potential in the modern direction of scientific-technological progress, and showing ways in which this potential can be exploited as effectively and quickly as possible under the present conditions of reproduction, so that significant economic progress can be achieved, not only in the near or more remote future, but now during the period of the present 5-year plan.

This is necessary, particularly because practical experiences have taught us that the discrepancies between potential results and actually materialized results can be very large indeed in the case of modern technical solutions. There are many instances where economic results can be achieved by means of microelectronics, calculating technology and industrial robots, which could never be achieved in any other way. It is equally possible that losses can be incurred of a magnitude which would not have been possible with the employment of traditional technology.



The main reason for this happening is that by far most of these modern technologies cannot be employed in exact applications, but must first of all be fitted into certain technological processes, and secondly, because they have to be joined up in complicated technical systems. This makes it necessary to approach the exploitation of the economic potential of modern technological solutions by other means, above all in a process-oriented and system-oriented manner.

The areas where microelectronics, robot technologies, data processing and modern control systems can be employed are by no means identical. However, the most important changes in the material-technical base occur where these areas of possible employment actually overlap, and where these technologies combine in complex, highly efficient technological solutions, that is, combine into automated machine systems.

There will no doubt be an increase in the differentiation of the technical-economic levels of the instruments of labor. Although manual, little mechanized labor will still play an important role for a long time to come, it is nonetheless necessary--also for reasons of competitiveness on the world market--to develop technically and technologically highly complicated and highly efficient systems for these instruments of labor, to produce and export them in a manner that will be in line with the trends of modern (job-oriented and work process-oriented) automation, and that will consolidate and further strengthen the positions that we have gained in the markets of the world.

#### Basic Characteristic Features of Results Achieved With Modern Automation

In the past few decades automation has made significant progress, not only quantitatively--the rate of automated equipment (as far as can be classified) in industry rose from 32 percent in 1970 to the present rate of about 50 percent--but above all in qualitative respects. The following must certainly be counted as among the most important trends in the qualitative changes of the instruments of labor:<sup>2</sup>

First, the complexity of technological solutions increases. This is first of all a consequence of the broadening of work functions that are performed by machine systems, but equally it is also due to the increasing integration of subsidiary processes with the main work processes. In metal working this trend manifests itself, for instance (in cases of flexible automation) in the transition from single numerically controlled machines (nc machines) to processing centers, finally to manufacturing cells or robot-equipped technological units<sup>3</sup> and integrated manufacturing sections.

This tendency of an increasingly plant-like character of the instruments of labor and a progressive transition from single engines to machine systems, has long been noticeable in the area of engine building, also under conditions of rigidly interlinked machinery with traditional mechanical, electrical, pneumatic or hydraulic control systems. Related to this development, there has been a development and a common endeavor to perfect energy, tool, workpiece and data flow systems.

This trend toward a growing complexity of the systems of instruments of labor received new strong impulses from the growing link between "classical machines," which primarily executed functions of energy and materials transformations (treatment and processing of work pieces and materials) with the data processing technology, that is, with the development of electronic controls and the use of data processing for the control and regulation of technological processes. The data processing technology, which was powerfully accelerated in its development by microelectronics, has a strong integrating effect, as it enables the control and regulation of a multiplicity of parameters in the work process of a real-time operation. Only by employing this technology is it possible to realize an effectively functioning diagnostic system (a system of automatic observing and automatic correcting for the purpose of preventing trouble). The data processing industry makes it possible to combine the control and regulation of technological processes with the automation of product preparation, organization and final accounting throughout the production process.

A second basic trend in the qualitative change of the instruments of labor is the growing flexibility of the technical systems. The decisive breakthrough to flexible automation was achieved with the development and employment of efficient controls based on microelectronic technology. Since the early sixties, the numerical control (nc technology) has gained an increasing significance, increased considerably further with the utilization of microelectronics.

The significance of flexible automated solutions consisted and consists, above all, in the fact that the broad sphere of small-scale or medium-scale mass production and the subsequent assembly became accessible to automation. This development was again closely connected with flexibility in another sense, namely the increasing adaptation of machine systems for specific operational purposes, which comprise a quick, in fact flexible reaction of the machine manufacturers to the differentiated and specific demands of the users, and a constantly increasing diversity in their final products. Modern technological solutions, such as manufacturing cells, integrated manufacturing sections and modern robot technologies can only be solutions of flexible automation.

The flexibility of automation continuously achieves new dimensions and materializes in new directions, as for instance proven by the manufacture of differing parts of the same assortment on one and the same automated machine system.

From an economic point of view, the increasing flexibility of automation is undoubtedly one of the most fruitful developmental trends in the area of the instruments of labor. The most significant economic results generally achieved by these technological solutions are above all savings in working hours, not so much in base time but above all in auxiliary time and time used on subsidiary processes.<sup>4</sup> An additional factor is that a shorter manufacturing cycle for parts and products results in a faster turnover, variability in the manufacturing program and a high and consistent quality, besides bringing about a considerable reduction in costs for rejects, repairs and guaranties. Savings in materialized labor mainly refer to the reduction of current funds and materials due to the accelerated manufacturing cycle for parts and products.

A third general tendency in the development of the automated instruments of labor is the new and increasingly effective combination of objective and subjective factors in the way the machine systems function. This does not refer to the significant effects of the progressive automation on the changes in work content, but rather to the dialectics in the tendencies of man, on the one hand, stepping out of the immediate production process, but, on the other hand, taking increasing influence on the operational functioning of the machine by means of software. The tendency of the complex and flexible automation to tend toward operations with little service requirements is unmistakable. Already today there are various manufacturing cells where a three-shift operation can be serviced by one or two shifts. In the light of this tendency, the production that is possible in this way is more and more directly the result of the technical and economic parameters of the production technology. However, the parameters that are actually being realized in the production process which applies the higher forms of automation are essentially determined by the programs that have been fed into it. This is undoubtedly a new effect of the subjective factor in the modern production process. It is remarkable in this connection that with progressive flexibility of solutions by automation, the tendency dominating in earlier years of centralizing the programming functions is being increasingly supplemented by programming at the work place, especially by sub-programming added by the operators of the machine systems.

From all these new tendencies of modern automation important new questions arise as to the collaboration of man and technology, questions that are primarily concerned with the most efficient use of investments, effective ways of reproduction as well as with the changes in work content. Here, we can only go into the first group of questions: how can we ensure a high degree of effectiveness and keep the discrepancy between potential and actually realized economic parameters of the machine system at a minimum; how, from this point of view, are we to determine the limits of flexibility of solutions that automation can provide; how can we achieve in addition to the labor-saving effects, a greater measure of savings in funds, energy and materials? How can we make sure that, on the one hand, no "automated islands" will come into being and complex solutions will be drawn up and will also be realized step-by-step?

#### On the Qualitatively New Role of Organization and Technology

Very obviously, a qualitatively new significance is being acquired by technology and organization in the context of modern solutions by automation. In the system of productive forces they assume greater importance as they occupy the key position for a complete utilization of the economic effects that are objectively inherent in automation. At the same time there are extremely intensive mutual interactions between technology and organization. For instance, the technological progress manifested by solutions of complex and flexible automation in the metal working industry is not in the first place derived from changes in the technological process, but the result of changes in technology in a comprehensive sense--from a different way of collaboration between human work, work object and instruments of labor--which also really means, derived from a different inner organization of the technological process. It also means: the economic benefit as well as the social effectiveness of the modern

instruments of labor have to be more and more "organized," in the broadest sense of this word. They are less and less a function of the altered technical equipment alone. In connection with the new trends in the system of production forces, the conscious organization of the ongoing processes is, therefore, the growing role of the subjective factor, of its influence on the development of effectiveness.

Most obviously, however, is first of all the close dependence of a higher stage of organization on the technology that is being employed. The higher level of the production organization is in a way directly tied in with the computer technology that is being employed.

As an essential element of all complex, but above all flexible solutions by automation, the control by computer technology and a corresponding system of transport and storage systems brings about the integration of main and auxiliary processes. This induces a melting together of all energy, materials and information currents into one unified production process. Beyond that, the interaction of all elements of the work process is less and less directly arranged by man. All in all it means that a qualitatively higher stage of the technological process is being reached. This opens up possibilities of raising the effectiveness to an unprecedented magnitude: the further intensification of the main process, the partial primary mechanization of the auxiliary processes and their automation, the objectivization involved and exact linkage of auxiliary processes with the main process, continuity of production and acceleration of processes, the consistent conditions that ensure a high quality in the manufactured product, all these are sources for a considerably higher level of effectiveness.

This entails an organizational "obligatory run,"<sup>5</sup> which is realized by the application of production control technology. Even under present day conditions of the machine tool industry the direct handling time in small-scale and medium-scale mass production takes up six to eight percent of the fund of time (calendar time) theoretically available for machinery manufacturing and one to two percent of the workpieces,<sup>6</sup> which results in a very high rate of immobilization of the current means in the manufacturing process. This rate is now about 40 percent of the volume of industrial goods production. If a continuous automated process with flexible conditions is introduced, it is assumed that the time of one work cycle per piece will be reduced by 60 percent.

In the past, an improved organization of production together with a higher principle of manufacturing was already able to achieve a considerable gain in effectiveness in this area. For instance, the introduction of article-oriented specialization in machine building operations led to a general increase in productivity of about 15-20 percent. With the transition from the previous mode of article-oriented specialization of manufacture to an integrated article-oriented, specialized production sector<sup>7</sup>--i.e., to a flexible process-oriented automation--the manufacturing process which previously had been discontinuous was turned into a continuous process. This has the effect of decisively reducing large gaps in time between actual handling times. The economy of flexible automation therefore depends substantially on how the manufacturing sequence can be tightened organizationally. This objective and above all, also, the



optimization of the process with frequent changes of the production tasks (including an optimum utilization of the machines and their optimum use at full capacity with different batch sizes) can only come about as a consequence of computer controlled organizational "obligatory runs," the outcome of which will be that human activity is being simultaneously and step-by-step detached from the "obligatory run" in the manufacturing process and work productivity will be considerably raised. In this way the significance of this kind of production organization will be substantially influenced by the variability of the assortment of the final products. There is also the increasing need to master not only the economical manufacture of selected parts, but of the whole spectrum of parts and components.

With the complex and above all flexible solutions by automation, there occurs an overall, far-reaching objectivization of all organizational operations. On this basis the question undoubtedly arises in a new form as to the possibilities and limits of conscious organization of processes and their influence on a vigorous growth of effectiveness. This became particularly obvious in connection with the flexibility of the technology.

In the past, consciously created organization was occasionally related to such conditions of production where there is no flexible automation.<sup>8</sup> In fact, the rational organization of the flow of information and materials, the assurance of qualitative structuring of operating on the basis of a division of labor, the necessary proportionality between the various separate partial operations and elements, as well as the spacial arrangement and synchronization of times of the particular production sector (e.g., by means of conventional operational production planning) is of the greatest importance in this hitherto conventional technology. Changes in the production tasks are possible, however, they entail tangible interruptions or obstructions; it is essential to keep their consequences within limits by a good production organization. Experiences therefore confirm: the more purposefully the means of conventional operational organization are utilized to secure--combined with higher principles of production--an exact and economically favorable sequence in the manufacturing process, the greater will also be the possibilities--up to a certain limit--of being able to cope with frequently changing production tasks.

International experiences signify that even older machinery can sometimes effectively produce a remarkable spectrum of final products if superior organization of its production flow in the conventional sense is instituted. The effect of organization plays an equally important role, for instance, in the employment of industrial robots of the first generation in robot-equipped technological units (that is, in an automation that has little flexibility). If there is a relatively large assortment of single parts for which all potentialities are being exhausted to ensure as far as possible the stability of the production tasks (group treatment), then there is an important condition for the effective employment of even a manipulating robot of limited movability.

These facts are of great significance for effectiveness, for the breadth of the socialist rationalization. To be effective, the small-scale and medium-scale mass production requires that greatest attention be given to conscious formation of a rational production organization in such places where there is a



conventional technology or a little developed flexibility of the automation technology. It would be wrong, however, to conclude in reverse that the factor "conscious organizational formation of the process" loses its significance to the degree that flexible automation technology is put into operation. This latter technology, though capable of adapting to changing conditions, does not replace in principle the conscious influence that man exercises on the organization of the course of production, but most certainly makes new and more far-reaching demands on this technology. It is the mental anticipation of the entire organizational course of production that gains greater significance and has to be handled in a new way, as will be demonstrated in the following revelation...

#### Flexible Organizational Solutions and Determining Appropriate Dimensions for Automated Systems

Organization and technology play an increasingly important role, particularly in flexible automation, for the internal optimization of the automated process.

It is crucial that flexible automation, too, must have an organization that reacts flexibly to diverse conditions. This makes great demands on problems solutions, or their algorithms, embodied in the software, as regards the organizational processes within automated production sectors,<sup>9</sup> where it must be generally emphasized that the flexible control of automated processes, for instance, the continuous readaptation of auxiliary processes to the demands of the main process, is still beset with many unsolved problems in the development of the software, also concerning the theoretical preliminaries. This does not refer only to such questions as solutions of standardization for software technology, a uniform linguistic concept, etc. This complexity also affects the functional connections between the automated process to be portrayed and the one to be created.

It is true, first of all, that the employment of flexible technology also results in very definite respects in a simplification in the formation of the organizational processes. In view of the "automatic nature" of the technology, that is, its ability to react ad hoc to changing production tasks, there is a reduced need to prearrange certain details in the concrete sequences of a particular process. A sensor-controlled feeder robot, for instance, is not "disturbed" by variations in the shape of the work pieces that are within the scope of his capabilities, regardless of how often such variations occur. Precisely because the robot can adjust itself, the change in the actual handling occurs without any loss of time worth mentioning as it carries out its adaptation. Considerably less organizational attention is required here as compared with that of less flexibility. It follows that the possible effectiveness of this robot is to a high degree determined by its technical capability, his capability to adapt to changing performance tasks (including the necessary software).

However, at the same time, growing demands arise as to the formation of the organizational relations within solutions by automation. They result from the fact that the individual technical units have to be combined into a system with the best possible performance. This concerns connecting the robot up with the

basic technical equipment (e.g., to the machine tools) and to peripheral items of equipment, and concerns even more the combination and uniform control of the machine tools, processing centers, production cells or robot-equipped units. The flow of diverse parts between these points must be constantly ensured in a rational way, while the economic effect of an efficient organizational solution derives, above all, from the facts that:

--the internal structure of the system in an automated production sector, the formation of rational relations between the various technical units, essentially determines the scope of labor savings and, above all, decides to what extent favorable relations are achieved between the capabilities of the system and the expenditure in basic equipment and automation technology that the system requires;

--this fact gains in significance under conditions of flexible automation because here the technical arrangements had to be attuned right from the beginning to all variations of the anticipated production tasks and therefore also entailed the great danger that excessive dimensions may have been provided for in particular sectors;

--the organizational solution has a decisive influence on how far an optimum can be achieved in the technical layout and management of the machinery, because a high degree of utilization of all equipment depends most essentially on to what extent, for instance, the change in the flow of production of work pieces passing at different cycles is achieved in a most rational and uncomplicated way.

A rational organizational solution can in a way work as a catalyst for economically favorable structuring and for the determination of the appropriate dimensions of the system. This kind of solution would essentially determine whether the performance of these technical complexes are achieved with a defensible economic expenditure. For this purpose there has to be a fusion of the technical and organizational aspects of software capacity.

All experiences support the view that with this kind of internal optimization in automated processes, we address under the aegis of economic criteria one of the fundamental preconditions for a high effectiveness through solutions by automation. There is no doubt that one of the causes of some solutions by automation not yet leading to a comprehensive increase in effectiveness, but yielding only partial gains in effectiveness, lies in the fact that it has not yet been possible to achieve an optimal structuring of the system, and that this structuring has not been undertaken according to sufficiently economic criteria. If, for instance, the employment of industrial robots raises productivity, but the scope of labor savings is not up to international standards and the expenditure of basic funds per product rises, this indicates in most cases some defects in the structuring of the system. It is crucial for effectiveness, for instance, that a feeder robot performs as many feeding tasks as possible within a certain time unit (including feedback to raise capacity of the robot!). Starting point

is the high investment embodied in the robot.<sup>10</sup> Time gaps in the utilization of the robot constitute--looked at economically--wasted social expenditure. "If a cutting cycle takes more than 20 seconds and even reaches into the minute range, it is no more effective to have the robot idle during the end of the cycle. It is then more advantageous to allot a second or third task to the robot in order to utilize fully the time that has become available due to the length of the cycle."<sup>11</sup> Employment of the robot on several places is, therefore, very important under certain circumstances, in order to keep the expenditure of investments per necessary feeding action as low as possible, or, expressed conversely, to fulfill as many feed tasks as possible within a certain time interval. Several places is equally important to increase the savings of work places.<sup>12</sup> In many cases high usefulness from the employment of a robot really results from its being linked up with several machines. The structuring of optimal collaboration of all technical units is a decisive factor in achieving effectiveness.

These factors, which are important for the effective employment of a robot and which are also significant in cases of less flexible technology, are apparently also applicable where whole production sectors are being flexibly automated. The fact is that in our present applications, the ratio between the increase in production volume or productivity, on the one hand, and the basic investment expenditure, on the other hand, are still relatively unfavorable in the case of integrated object-oriented production sectors. In case of a 50 percent increase in productivity, we have to reckon with an increase in the investment expenditure of 100 percent or even more.

Of course important aspects of the intended utilization of integrated production sectors in themselves, such as accelerated work cycles or the substitution of human labor, especially also in the auxiliary processes, are to a certain extent very costly in investments, so that the lower levels of automation in the auxiliary processes result in a considerably higher investment expenditure as compared with the main processes. As a rule, it is in the auxiliary processes where the larger portion of the investments is concentrated, in spite of the lower return they yield.<sup>13</sup> As a whole, this will result in a considerable increase in investment expenses for the labor force.

Even taking all these factors into consideration, and considering furthermore that the economic expenditure for the whole solution is essentially determined by whatever is being provided, technologically, with regard to individual elements of equipment, the economic results up to the present must be evidence for shaping, particularly the internal structure of such automated solutions, even more purposefully, starting out from high and unequivocal economic handicaps and consciously opening up the internal effects of the system.

For this purpose, programs for a computer-supported structuring, to determine dimensions and simulation of production and production control processes with automated production sectors are an absolutely indispensable prerequisite. They aim directly to anticipate and open up the internal effect of the system in these automated solutions--also those of a rational organization. For instance, it was possible in one case to achieve with two simulations of an integrated object-oriented production sector with 58 work places, during the planning

phase, an increase in the degree of utilization of the investment for work places and work hours by 10-30 percent, an increased tightening up of the manufacturing process (from 30 rising up to 75 percent), a reduction in cycle time by 60 percent and apart from that also a saving in required floor space. All in all, a considerably higher quality of solution could be achieved.

From these results we can unmistakably conclude that it is in the scientific performances of rendering these kinds of models into algorithms that rests, in the final analysis, the whole mental preconception of the automated process, a preconception that will essentially influence its effectiveness. It depends decisively on the efficiency of this software as to what degree of effectiveness can actually be extracted from whatever is technically possible. The question that we posed at the beginning as to the limits of flexibility, can be answered from an economic point of view only in connection with the capabilities of these models. It can therefore hardly be expected, even for the future, that flexible solutions by automation could find application for individually produced items, but the question of how far the application can be defended in cases of declining numbers of pieces will depend largely on the prerequisites for the planning of systems that are optimally constructed under these conditions. It is equally valid to say that the results achieved so far in integrated processing sectors are at present not yet, in every respect, up to what we expect from these qualitatively new technical solutions and are still not yet to be considered as the economic limits for the full expansion and development of this flexibility. In our opinion they are rather to be understood as an emphatic proposition to develop all the potentials for growth of effectiveness inherent in these systems to their full usefulness by a far-sighted scientific penetration. This is particularly true because the main sources of their rationale lie in a new, more rational stage of collaboration of work force, instruments of labor and work piece, and because the whole process can only function as well as it is preconceived in the software.

#### Organizational Structuring of the Surroundings

The increased significance of organization and technology can furthermore also be traced back to the fact that the rational structuring of the relations of automated solutions of production to their surroundings have become an irrevocable element of effectiveness. This is above all a consequence of the fact that the changes in the surroundings result from the technological-economic targets of the automated solutions themselves, from the factors and conditions that are causes of effectiveness. The primary economic effects of flexible automation are to a high degree the effects of shortening the processes and thus a rational structuring of the whole operational reproduction process, which naturally requires a higher level of technology and organization.

The accelerated growth of the product assortment and the rapidly reacting response to specific user requirements not only make flexible automation of the production a necessity, but also require for the same reason, for instance, a significant shortening of the time available for product development and production preparation, and a correspondingly fundamental change in the technical-technological and organizational level in project-designing, planning and technological preparations. This means that it follows from the objective of automated solutions that the rationalization cannot be aimed at priori only



at certain individual production sectors. The following fact will clearly illustrate the economic significance of a fundamental change in the organizational-technological level in areas that precede production: Owing to the volume of information which doubles about every 5 years, the share of the labor force in the areas of technical preparation of production, planning and administration in the metalworking industry with complex mechanization and automation of production has risen four times faster during the last 15 years than the share of the labor force which is directly engaged in production. At the same time more space is being taken up by noncreative activities.<sup>14</sup> A lasting change in these tendencies can only be brought about by a step-by-step introduction of automated information processing, which makes possible considerable savings in work hours, further shortening of the process as well as improvements in quality.

However, the question here is not one of rationalization per se, a rationalization that, move after move, spreads to all sections of the operational reproduction process. The essential matter is rather its close tie, starting out from the common aim of an overall change in the operational reproduction process, in which there is so-to-say a recalculation back to the technological and organizational change in the individual production sectors, as well as the unconditional adaptation of the areas preceding and following production to the requirements and effects of the automated manufacture.

It is essential that the surroundings of the automated manufacture be structured in such a way that they can contribute fully to increase effectiveness, so that "external" conditions may be provided for the integration of the automated solutions into the operational reproduction activities. This means, first of all, to create within the factor the preconditions of, as well as the capacity for, absorbing the high continuity and accelerated performance of the automated parts manufacture under flexible conditions.

One of the most important aims of flexible production solutions, a manufacture that requires little service and attention, aims at a high degree of savings in human labor, that is, above all, for the "parturition" of human labor from the direct manufacturing process. This is directly linked with the urgent task to use to full capacity all basic means in a three-shift operation (44 percent of the losses of time--related to a theoretical capacity (calendar time)--presently result from an incomplete utilization of the second and third shift; even a transition to a two-shift operation--attendance only for the day shift, not for the night shift--it is estimated, will reduce machine costs by 50 percent). This can be achieved in an economically sensible way only if the organization of the surroundings are suitably structured, which means, if the rational organization of operations has created the preconditions for a full use of all capacities of the automated processing sector and if its results are also smoothly "absorbed" in the manufacturing operations. This extends also to an effective collaboration with the assembly, above all also to the supply area. A rational organization of operations of this kind will in part even extend beyond the factory. It is known internationally that effective flexible production solutions in the manufacture of final products of varying models (most prominent in the Japanese motorcar industry) rely, to a high degree, on a strict adaptation of the suppliers to the flexibility, and on keeping the supplies flowing uninterruptedly.



The purposeful organization of the surroundings, which is essential for a utilization of the automated production to full capacity, can, of course, open up considerable possibilities to achieve a more favorable relation between basic investment expenditure and production results in the automated production. It must be pointed out, however, that the expenditure for automated solutions, which is generally very high, to be really profitable, will still require "additional" effectiveness from the rationalization of the surroundings.

If the direct economic effect of automated solutions consists primarily in the saving of human labor, and if the saving of concrete labor presently covers savings in materials--this not so much a direct saving of materials, but rather a saving of material means of the work flow (reduced processing cycle)--it will, according to all experiences, have two consequences for the structuring of the surroundings: Firstly, a purposeful organization must ensure that the shortened cycles in the automated production sectors will come to bear fully in the operations. This means, that we must be concerned that, for instance, longer storage times in the provision of materials and before assembly must not consume whatever time was saved by the shortened cycles in the automated production. Secondly, in this connection, such "additional effects" must be organized in the factory for the saving in basic funds per finished product, which will effectively supplement the rather limited capabilities of the automated production to increase basic funds. In this respect it is possible, among other things, to save storage capacities, but also, for instance, to use automated parts production to eliminate a bottleneck in the operational reproduction process and in this way smooth the way for high continuity and performance in the assembly.

It is therefore confirmed, in these contexts too, that the effects of such kinds of automated production solutions are fully brought about only if there is a guarantee of an uninterrupted flow from initial disposition of the order, the acquisition of materials, through parts manufacture to assembly, and finally to sales. These effects can be fully assessed only in the context of the entire operational result, and they can also only be organized out of this viewpoint.

All this includes the necessity to adapt fully the conceptional layout and the capacitative arrangement of the automated production solution itself to the technical-technological and economic overall development of the operation. To avoid automated "islands," which are ineffectual and do nothing to promote the further automation of operations, it is therefore not only necessary to structure the surroundings with the objective of a high efficiency of the manufacturing solution, but, conversely, it also requires the choice of the variety of automated production which is best suited to the concrete conditions. In this connection, consistent analyses of the processes are essential from the point of view of the whole operational reproduction happenings.

May we remark in conclusion that the flexible solutions by automation seldom show a measure of the flexibility it is possible to achieve with conventionally mechanized manufacture, because the former react "with much greater sensitivity to changes of the external factors than is the case with traditional manufacture. This is so because there is much less latitude for technical and

organizational alternatives."<sup>15</sup> Experiences reveal, however, that this fact is insignificant if the level of organization and technology, which precedes and follows the automated system, are sufficiently adapted.<sup>16</sup>

### Step-by-Step Buildup

The outstanding role of purposeful technological and organizational solutions under conditions of complex automated solutions by automation result in the end from the fact that they are generally realized and accomplished by way of rationalization, which means, by way of a step-by-step buildup.

The possibilities to install or modernize in this way complex and flexible solutions by automation result essentially from the peculiarities of these technical solutions themselves. Precisely because the identical equipment can produce different products, the product development is not so compellingly related with equipment development as, for instance, in the case of rigid solutions by automation. This allows us to counteract, to a considerable degree, the moral obsolescence of the manufacturing technique; changes in the manufacturing process are effected considerably more by changes of the software with respect to given pieces of equipment. The perfection of the software is thus, also in this respect, a major way of reducing the difference between the potential and the actually achieved level of effectiveness of automated flexible machine systems.

From the technical angle, the step-by-step buildup is made possible and promoted by a hierarchic arrangement of computer technology, which means the employment of a number of computers appropriate for the various particular levels of the system. This also creates a certain compatibility of the system with defects and failures.

In more detail, the following positive results are mainly connected with this step-by-step buildup:

--We are dealing here with a genuine rationalization solution, which also utilizes and qualitatively develops the existing material-technical potential. It is therefore possible in the buildup of integrated object-oriented production sectors to continue to use conventional machine tools, because no effort is made toward a complete automation of all processes from the start, while the unity of the solution is ensured through the uniform control of transport and storage processes. This opens up good opportunities for savings in the basic fund.

--The plan of a step-by-step buildup makes it possible to arrange automated production solutions that are variable and capable of different interpretations, and in this way to adapt them to the different operational preconditions. This can facilitate taking the real conditions of the factory into account, also its investment strength.

--The buildup of smaller and therefore easier to manage sectors, in which the degree of automation will be increased step-by-step or in a supplementary subsequent action, and which are put into operation one after the other, or even

parallel, are advantageous because here the whole solution from its very beginning is easy to control. If there are experiences with initial difficulties in starting up, or with the functional capabilities of the system itself, it is easier to utilize such experiences quickly in other sectors, etc. According to accumulated experiences, losses through frictions, caused naturally by the complexity of the complex systems, can be reduced in this way.

This kind of step-by-step buildup, which also agrees with the resource situation, generally entails compromises and provisional arrangements, but these cost less in expenditure if they are derived from a preconceived, long-term plan and if they do not have to be remedied in later subsequent actions. This means that the step-by-step buildup can be effective only if it is established consistently and modularly according to the building block principle. It most urgently requires organization, typification and standardization. It is particularly important to determine exactly and from the start the "incisions" between the separate building that are separated by shorter or longer spaces of time, so that solutions come about that are truly socially, and in multivalent ways, useful. On the one hand, it is characteristic particularly of flexible solutions by automation to create a specific variant form suitable for the respective structures and specific for each individual operational case. On the other hand, creating an unnecessary large number of "individual" solutions must be avoided, because these would encumber expenditure for planning, start up and for current operations. The broadest effectiveness would urgently require that for each single individual step the compatibility with the system be ensured in a farsighted way.

As a whole it becomes clear that securing the mental precursory conception, in the sense of an anticipatory shaping of the process and the system, has become an essential factor, decisive for the effectiveness of automated production complexes of this nature. The necessary intensifying effect of the scientific-technological progress is here extant only as the result of a deep and purposive permeation and change of whole sectors of the reproduction process in the factory or the combine. This side of the dialectical mutual interaction between the increasing objectivization of the production process and the growing role of the subjective factor appears side by side with the undisputed fact that progress in effectiveness is in the end opened up by the qualified activities of the workers who service and supervise these complicated technical systems.

#### FOOTNOTES

1. "Report of the Central Committee of the SED to the 10th SED Party Congress," Rapporteur: E. Honecker. Berlin, Dietz Verlag, 1981, p 49.
2. In our opinion, flexibility is one of the most important, and perhaps also the "newest" characteristics of modern automation, but must absolutely be viewed in connection with the other significant characteristics (cf. H-D. Hausteiner and H. Maier, "Flexible Automation--Core Process in the Revolutionary Changes of Productive Forces in the Eighties and Nineties," in WIRTSCHAFTSWISSENSCHAFT, 5 (1982)).

3. NC machines, processing centers and manufacturing cells (robot-equipped technological units have the same character as manufacturing cells) are stages of the work place-oriented (flexible) automation, which can also be combined into modularly structured systems.
4. In the production of large series and in mass production the ratio between basic time and auxiliary time, and between preparatory time and conclusion is 1 to 1, however, the ratio is 1 to 2 in the small-scale and medium-scale mass production.
5. This is generally understood to be the rational combination, unmistakably determined by technology, of all elements of a production process, that is, in respect of material, time and space. With the strengthening of this "unavoidable course" human labor increasingly attains the possibility to remove itself from the actual manufacturing process.
6. For years, the piece by piece, small-scale and medium-scale mass production of the metalworking industry in the GDR tied up 75 percent of all manufacturing expenditure. Intensive efforts to unify and standardize parts and components, as well as to develop production according to the building block principle, have already created important organizational preconditions in production for the application of higher modes of manufacture. This task will also remain a topical question of the future, in order to utilize the economic advantages of larger series in a more purposeful way. Nevertheless, in machine building, for instance--starting out from a necessarily broad assortment of products (for different conditions of application) and the rapid changeover to newer models--the rationalization of production of relatively small series will gain in importance (cf. the lectures at the International Congress Metalworking 1982 at Leipzig, 10 March to 12 March, 1982).
7. First stage of flexible automation of the manufacturing process: a sector of the production of geometrically or technologically similar parts, set up and ordered mainly according to a goal-oriented principle, where, apart from processing on numerically controlled and conventional machines, the handling and storage as well as transport of work pieces is mechanized or automated, and the control of main and auxiliary processes as well as manufacturing controls are linked with each other.
8. Cf. for instance, J.A. Sawinow and M.N. Tschepurin, "Production and Application of Industrial Robots," SSA 12 (1981), p 26, in Russian.
9. Experiences have shown that the elaboration of the software for the organizational solution has proven difficult, due to the complicated interdependent items in larger complex systems. This is undoubtedly one of the reasons why, generally, in every case of employment of computer technology in the control of manufacturing processes, it is an illusory assumption that the technical installation of the equipment and the mathematical modeling of the technical relations in the automated system alone will have essentially provided the preconditions for a high effectiveness. However, in flexible solutions this problem intensifies even further.

10. This refers to the actual social expenditure without the influence of price formation.
11. I.F. Engelsberger, "The Use of Industrial Robots for Loading Machine Tools," in "International Congress Metalworking 1982," as quoted above. That apart from the full utilization of the robot's time, other criteria can also play a role in these considerations of an optimal structuring of the system, depends on a variety of circumstances, among others also on the reliability of the robot and the expenditure invested in the robot, as compared with a machine tool. It is therefore emphasized in the literature that under certain circumstances it is necessary to allot one robot to each machine, because if one robot serves a number of machines, its failure would idle several machines. The economic loss could then be much larger than the loss due to occasional pauses in the cycle.
12. If several machines had been served together even before the employment of the robot, this would pose additional demands on the efficiency of the system that is to be organized, and imposes particularly larger consistency on the multishift utilization of the automated sector.
13. For instance, the expenditure released in an established integrated manufacturing sector, per 1,000 hours of worktime saved, amounted to 149,000 mark in the auxiliary processes, while it was 261,000 mark in the main processes.
14. Cf. M. Speck, W. Hickmann, E. Paessler, A. Russi, W. Schmalz, R. Thum, W. Uhlmann, G. Kessler, H. Willem, Weber, "Developmental Tendencies and Experiences in Metalworking in the Small-Scale and Medium-Scale Mass Production," in "International Congress Metalworking 1982" as quoted.
15. H-G. Piegert, K-H. Wittig, K. Weichhold, "Experiences in the Employment of Machine Systems in the Machine Tool Industry of the GDR," in "International Congress Metalworking 1982," as quoted.
16. Ibid.

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## GERMAN DEMOCRATIC REPUBLIC

### ACADEMICIANS URGE MORE EFFECTIVE RESEARCH IN ENERGY, ELECTRONICS

East Berlin NEUES DEUTSCHLAND in German 5 Apr 83 p 3

[Open letter by Presidium of GDR Academy of Sciences to SED Central Committee: "Great Research Effectiveness Is the Objective: Academy Members Confront Increased Tasks to Strengthen GDR--Focal Points of Economic Strategy for 1980s' Set Standards--Consult on Priority Tasks--Continued Emphasis on Cooperation with Combines"]

[Text] Dear Comrade Erich Honecker!

The basis orientation for the continued implementation of the 10th SED Congress resolutions in your report at the conference between the Secretariat of the SED Central Committee and the first Kreis secretaries enjoys broad agreement in the GDR Academy of Sciences. Without reservation Academy members support the policy of guaranteeing peace, social growth in performance and social progress. With determination they confront the greater tasks for the political and economic strengthening of our republic and to guarantee its socialist accomplishments.

Dear comrade Erich Honecker, your charge to bring scientific potential to bear even more effectively as a factor in economic growth in performance touches directly on the objectives of basic research and thus on the establishment of the main directions of disciplinary and interdisciplinary research. The Presidium of the GDR Academy of Sciences has oriented the scientific work of its institutes and organizations to the focal points of the economic strategy of the 1980s and to evaluating the advance in knowledge, which both has been created and is yet to be created and which has taken as a primary basis the criterion of its social utility. In interpreting your speech we see our responsibility for the long-term strategic orientation of the basic research of the Academy as being substantially elevated to high economic efficiency.

#### Economic Efficiency Sets Priorities

In assessing the development of performance of the Academy's research in 1982, the Presidium reviewed the priorities for various scientific sectors comprehensive research tasks and discussed tasks which are to receive priority treatment.

These tasks include:

- increased efforts in the area of efficient utilization of energy;
- research in the area of industrial nuclear energy in respect to which, through concentration, there will be an intensification of research capacity and a binding orientation to topics, whose results are either immediately necessary in the economy or will be in the next few years;
- carbochemistry, primarily including accelerated development of essential technological-economic indications of a process for intensified material utilization of our brown coal;
- bases for more efficient utilization of available inorganic raw materials, especially domestic ones;
- intensification of research in the area of microelectronics,
- increase in the scope, level and objectives in the area of optoelectronics in respect to the plan;
- increased development of research in the area of high-speed digital information processing;
- intensification of computer network research as a basis for the accelerated establishment and expansion of data communications systems;
- research which is directed toward the development and efficient use of industrial robots; in this connection, as a prerequisite for robots of the third generation, it is primarily a matter of increasing the intelligence capacity of such systems;
- development of organic and inorganic synthetic chemistry with the goal of high-grade finishing;
- increased efforts in the area of material research;
- intensification of work in the area of biotechnology;
- concentration on selected areas of material research with the goal of discovering and introducing drugs for human medicine and animal production and methods of plant process control for the regulation of growth and for plant protection;
- clinical research with the goal of introducing, on a priority basis, molecular biological and the most recent medical discoveries to prevent and treat diseases involving tumors and the heart and circulatory system and selected metabolic diseases;
- increasing contributions for rapid growth in agricultural production and for healthful nutrition for the people, especially for crop and animal

production and to produce high-quality essential and nonessential foods and beverages;

--providing ahead of schedule the outcome of hydrologic-ecological basic research for Berlin's long-term drinking water supply and reducing the economic and technical cost for drinking water treatment;

--scientific instrument development by the Academy of Sciences in order to accommodate urgent research requirements. Through intensification of research, design and production processes the Center for Scientific Instrument Development of the Academy of Sciences will achieve at least 3.5 percent additional production in respect to the plan.

#### Important Contributions to Disseminating Our Ideology

The Academy's social scientists are giving all they can to contribute effectively to the implementation of party resolutions by means of extraordinary accomplishments in research and ideological work.

The priority issues here are:

--to demonstrate convincingly via aggressive grappling with bourgeois ideology the relevance and vitality of Karl Marx' great revolutionary work in theory and practice by promising new research accomplishments and to have a massive effect through a variety of work which shapes awareness;

--to cooperate closely with natural scientists and engineers for the more rapid implementation of scientific-technical progress, especially in the areas of flexible automation, efficient utilization of microelectronics and guarantees for the energy base, and to present original and practicable findings;

--to continue steady historical research where the basis is the GDR as the legitimate heir of everything revolutionary and progressive in German history and thus also to have an effect on the continued preparation of the Marxist-Leninist image of history.

Today more than ever, we attach great importance to the linking of Academy organizations and combines. The proven coordination of research development designs by the combines and the basic research of the institutes is assuming increasingly greater importance in respect to the scientific lead for the economic reproduction process. Thus, the priority concerns of the Presidium of the Academy of Science include promoting conceptual and actual scientific-technical interplay of basic research and production. In this we are at the same time also concerned with greater inventive performance as a result of this cooperation.

#### Division of Labor With the CEMA Partners

Esteemed comrade Erich Honecker, the Presidium of the Academy of Sciences emphatically welcomes your statements on economic and scientific-technical

cooperation with the socialist states, especially within the framework of CEMA. In this we see our obligation to intensify the close relations which have developed over many years with the academics of science in the USSR and the other socialist states and to advance their economic effectiveness for the benefit of the socialist society in our countries.

Many fundamental problems of natural scientists, engineers and social scientists urgently demand the intensified, cooperative division of labor in respect to the research potentials of the socialist states. In this we include, among others, such areas as nuclear and high-energy physics, space research, solid state and material research, microelectronics, automation of production processes, information processing and technology, carbon-chemistry and biotechnology including genetic engineering.

The directions which were set forth in the conference between the Secretariat of the SED Central Committee and the first Kreis secretaries require all social sectors to give priority attention to the questions of intensification, development of reserves, performance evaluation and differentiation, relationship of cost and use and their development into criteria of management activity. With this, the Presidium of the Academy of Sciences feels that an additional decisive point in its political responsibility has been addressed. In this connection we attach substantial importance to the political and technical motivation of all staff workers of the Academy, the expression of the will to perform, the critical coming to terms with moderation and contentedness, the stimulation of competition and other factors of socialist management activity.

#### Level of Performance Further Increased

In view of the significant initiatives which the state-owned combines are undertaking to fulfill and exceed the 1983 economic plan all around, as was so convincingly expressed at the Central Committee seminar with the general directors of the combines, the Academy of Sciences cannot and will not take second place when it is a matter of substantially increasing the scope of performance, the level of performance, the social effectiveness of its research results in 1983 and at the same time when it is a matter of focusing on the continually growing demands in the years ahead.

We can state that based on your speech, dear comrade Erich Honecker, and initiated by the joint efforts of the Presidium, Kreis party organization and trade union group of the Academy of Sciences, numerous collectives in the institutes and organizations have accepted their responsibility by promising new obligations and progressive considerations.

We promise the party and government leadership that we will use all our knowledge and know-how in order to do complete justice to our responsibility in the Karl-Marx Year of 1983, which places a special obligation on us.

With socialist greeting

Prof Dr Werner Scheler, Academy Member, President

Prof Dr Ulrich Hofmann, Academy Member  
Prof Dr Werner Bahner, Academy Member  
Prof Dr Werner Kalweit, Academy Member  
Prof Dr Hermann Klare, Academy Member  
Prof Dr Heinrich Scheel, Academy Member  
Prof Dr Heinz Kroske, Academy Member  
Prof Dr Gerhard Keil, Academy Member  
Prof Dr Manfred Peschel, Academy Member  
Dr Horst Klemm, First Secretary, SED Kreis Management  
Prof Dr Heinz Stiller, Academy Member  
Prof Dr Lothar Budach, Academy Member  
Prof Dr Joachim Herrmann, Academy Member  
Prof Dr Werner Lange, Academy Member  
Prof Dr Robert Rompe, Academy Member  
Prof Dr Hans-Juergen Treder, Academy Member  
Prof Dr Gert Wangermann

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CSO: 2300/225



HARD CURRENCY OBTAINED THROUGH WESTERN TOXIC WASTE STORAGE

Duesseldorf WIRTSCHAFTSWOCHE in German Vol 37 No 16, 15 Apr 83 pp 166, 168

[Unattributed article: "Garbage Disposal: Hard Currency from Garbage"]

[Text] The scandal about the missing toxic barrels from Seveso, which had long been said to have ended up in the GDR, highlights the East Berlin hunger for foreign currency. In the meantime, the GDR is greatly in demand as a storer of waste of all kinds.

"In Hamburg, our trade is almost dead," complained Rudolf Irum, federal business manager of the Federation of Private Urban Waste Removal Enterprises, in which the nonmunicipal waste removers are organized nationwide. The Land of Hamburg concluded a contract with the GDR, instead of with them, for removal of all waste arising in the Hanse city, be it household trash and garbage, or the often problematic special waste. In the meantime, waste transports from Hamburg to the GDR amount to over 250,000 tons annually.

The Land of Schleswig-Holstein, also, increasingly prefers GDR dumps to its own. "About 30,000 tons annually," says Ernst Wilhelm Rabiuss, spokesman in the Kiel agricultural ministry, are sent by the northernmost federal Land to a GDR dump in Schoenberg, only a few miles from Luebeck. By now, a total of 350,000 tons of waste are being shipped to that dump; about 50,000 tons of that are a kind of "transit waste" from foreign shippers. The Dutch, in particular, ship any amount of waste to the GDR. Experts estimate East Berlin's foreign currency income from this dump alone to be about DM 15 million per year.

On the Western side, only one West German transporter organizes the waste business with the GDR: the Hanseatische Baustoff-Kontor GmbH (HBK) located in Bad Schwartau. It is authorized by the GDR as general agent. HBK got this position as a kind of "thank you."

While searching for clay and construction material deposits on the eastern part of the Bay of Luebeck, the West German firm found nothing of the sort, but it discovered the perfect location for waste storage. The Schwartau firm quickly came to an agreement with GDR authorities: in return for the

idea, HBK received the right to transact all Western business. Since the beginning of January 1981, this West-East garbage trade flourishes on the 200-hectare waste dump, which can accommodate more than 40 million tons of waste.

West German customers are glad that this waste site exists, since West German garbage dumps are nearly filled up. Plans for new dumping sites--particularly for special waste--increasingly run into permit difficulties and neighborhood protests. The only ones aggrieved are the private West German garbage removers. For many years, the approximately 500 private waste-removal firms--60 of which specialize in special waste removal--did a booming business. "Every year," according to federation spokesman Trum, "the amount of waste in West Germany has increased by an average of 3 to 5 percent." Private firms managed to corner an ever-larger share of this volume.

In the meantime, half of the West German population rids itself of its household trash--about 30 million tons in total--through private collectors. The waste turnover of the 500 private trash collectors now amounts to DM 4.5 billion. Particularly in rural areas, municipalities more and more turn over trash removal to less costly private enterprises. In the case of special waste--about 3 million tons annually--the 60 private enterprises dominate the business with 95 percent.

But the trash collectors are complaining: During the last 3 years, the mountains of garbage did not keep growing. Increased environmental awareness and a stagnating economy show their effects here, also. And increasingly, the price-aggressive GDR robs them of many a lucrative deal. "From an operational standpoint, we cannot compete with their prices," says Trum. The federation spokesman has the suspicion that, especially in the case of special waste which is supposedly subject to strict cautionary measures when stored or destroyed, the GDR proceeds "a little more leniently than the West Germans, "else they couldn't offer such prices."

Rabius, of the Kiel agricultural ministry, does not want to hear about careless storage of special waste from Schleswig-Holstein: "The dump in Schoenberg is particularly well-suited for it." Nevertheless he decries the fact that the control function of the federal state is limited to its own waste. Rabius: "Our state signed a list of ordinances with the GDR which is being adhered to over there." But whatever else is transported to the East through the northern border station, for example from abroad, "we have no say on that."

The Schoenberg deal, in the meantime, has given the GDR the idea of establishing a chain of additional dumps along the border of Lower Saxony. Then HBK of Bad Schwartau probably will be part of the deal. "If this should come about," Trum prognosticates for his trade, "it will certainly become critical for us." Because: "Many of our enterprises invested millions in the establishment of special waste installations. They would then have to close."

9917

CSO: 2300/227

## ACCOUNTING FOR HUNGARIAN NATIONAL BANK FOR '82 REPORTED

Budapest HETI VILAGGAZDASAG in Hungarian 23 Apr 83 pp 4-6

[Article by Ervin Fabri: "The General Assembly Meeting of the Hungarian National Bank--Reckoning"]

[Text] The Hungarian National Bank [MNB] held its annual general assembly meeting Tuesday this week. The balance sheet of the bank was examined and approved. Our readers can be acquainted with it by the following table. However the less initiated in the mysteries of finances may have difficulty in finding their way in the intricacies of a bank's balance sheet. Thus we have chosen a banking expert to serve as a "tourist guide."

No matter how incredible it might appear the MNB is also an enterprise. What distinguished it from other enterprises is that its accounts and business activities do not reflect its own functions alone, but also those of the national economy as a whole. For, through its activities, for example, its granting of credits, control of the domestic money circulation, foreign-exchange management and issuing of money, it has a close relationship with all economic organizations and the population at large.

Accounting is being made for each business year at the annual general assembly. This is the bank's top decisionmaking body. For the MNB is a joint-stock company with a capital of 6 billion forints divided into 300,000 shares with a nominal value of 20,000 forints each. The shares are owned by the state. The general assembly, that according to the bylaws has to be held once a year upon preparation and examination of the balance sheet, is being convoked by the president of the bank acting as chairman of the assembly meeting. This is attended by the representatives of the owner, i.e., the state, who have the right of vote, and members of the board, who have only consultative faculties. Some of these latter are employees of the bank--assistant presidents, managing directors--and some are prominent economic experts who are not employed by the bank. Members of the management are elected by a previous general assembly meeting. In attendance are also the auditors, who are not employees of the bank either, and were appointed by an earlier assembly meeting. Finally, other participants are personalities of the national financial community and delegates of other financial institutions.

The chairman submits to the general assembly meeting the balance sheet, the income statement and the report concerning the past financial year. The auditors make a statement about the correctness of the balance sheet and the income statement and affirm that according to their findings both tally with the bookkeeping of the bank. The assembly meeting discusses all this and votes on whether or not to accept their reports and as to whether the profits should be entirely turned over to the shareholder, i.e., the state treasury, or part of it ought to be invested into an increase of the bank's capital and/or reserves.

This year's general assembly meeting took place last Tuesday, 19 April according to these rules. The 31 December 1982 balance sheet, the 1982 income statement and the report concerning the last business year were discussed and approved on the basis of the presentation of them by the president of the NKB, Matyas Timar.

The bank's balance sheet reflects most graphically the characteristics of the credit, money circulation and foreign-currency processes during last year and it shows our successful efforts to maintain our international solvency and to improve our foreign-trade balance. Yet it also reflects the difficulties involved in all this.

Among the assets of the bank the gold, foreign-exchange and currency reserves and sight deposits amounted on 31 December 1982 to 38.9 billion forints, i.e., 26.2 billion forints less than at the end of 1981.

The biggest item on the active side of the balance sheet used to be, and is also now, the stock of bank loans, divided according to maturity and the principal groups of debtors. Among the latter, loans granted to enterprises and cooperatives are predominant. Thus the configuration of the bank loan stock--that depends on the credits granted and the refunds received--reflects the bank's credit policy and its rate of efficiency.

The 1982 credit-policy directives entailed more severe and selective credit conditions than earlier rules. During last year, the bank further raised interest rates, thus trying to stimulate the enterprises to moderate accumulation in view of the high interest rates of foreign financial sources. Sixty percent of the investment credits served several important economic targets which were raised into prominence: increased export capacities, recycling of waste materials, rationalization of energy consumption, development of foreign tourism and improvements in consumer supply. The bank also tried to stimulate, through its working capital loans, more rational stockpiling and faster collecting of income derived from export.

This policy of the bank is also reflected in the moderate growth of loans in general. As we can notice in the balance sheet, medium- and long-term bank loans amount on 31 December to 388 billion forints. This is only 96 billion forints more than the total at the end of 1981, which in turn is less than the growth a year before. Moreover, within this total the loans granted to enterprises and cooperatives were 38 billion less in 1982 than in 1981, indicating the effectiveness of the government's policy and practice aiming at

more moderate investment and stockpiling activity. The total of short-term loans amounted on 31 December to 152.6 billion forints, 23.7 billion forints in excess of the 1981 total. Within this amount the loans granted to enterprises and cooperatives increased by 10.4 billion forints, i.e., somewhat less than the year before.

Our financial activities in 1982 were marked by an important development: Hungary's joining of the IMF and the World Bank. Thence a new asset appeared in the MNB's balance sheet, i.e., a credit of 15.5 billion forints, which is due to us as members of the IMF and came about after our payment of the membership quota.

The first item on the liabilities side of the bank's balance sheet is the share capital which is invariably 6 billion forints. The reserves, on the other hand, have grown. This is a result of a resolution of the 1982 general assembly meeting which raised the reserve fund by 1 billion forints using the profits of the 1981 financial year. Thus, this fund on 31 December 1982 was higher than a year earlier, i.e., 4.4 billion forints. Among the liabilities, the largest item this year as always is the stock of deposits and other commitments that have a specific role and importance in a banknote-issuing bank's balance sheet. These are the credit balances of the deposit owners and therefore the liabilities of the bank. Most of them derive from credits granted by the bank. For when the bank grants a loan (the figure of which appears among its assets) it credits it to the deposit account of the debtor.

The total amount of the money deposited with the MNB, which is the product of credits, is the so-called banking account money. This is the fund from which the bank makes payments to the depositors to the extent of their deposits. If this payment is made through the clearing of mutual accounts, then the total of the banking account money in the national economy (i.e., the deposit stock in the bank) does not change, only the balances of the respective accounts. However if the payment is made in cash, then the balance of the banking account money decreases and the amount of money in circulation (banknotes and coins) grows but the total amount of money in the national economy does not change. For deposit stock and cash stock differ only their appearance, but inasmuch as their substance is concerned they are both essentially money, and the two together make up the domestic money. And since money is produced by credit, the money in circulation decreases by the amount of the reimbursement of credits. The deposits in an issuing bank constitute a source of credits: the durable sources (nondemand deposits and the capital and reserves of the bank) are, for example, the collateral of the durable banking loans (medium- and long-term credits).

According to the balance sheet of the MNB, nondemand accounts increased 27.8 billion forints last year to 345.8 billion, and sight deposits decreased 3.8 billion to 167.4 billion forints. Thus the total amount of deposits amounted to 24 billion forints more than last year's total.

A specific liability, characteristic for a banknote-issuing bank, is the amount of banknotes and coins, in other words the cash, in circulation.



There is essentially a liability for the same reasons as the deposits. For cash is in itself a product of credits granted. The bank when extending credit, that is, opening a bank account, charges it on to the holder's account and credits its debit account with their amount. The owner of such an account may, for example, for payment to a creditor, order that part of the banking account money changes into cash. This operation is the issuing of money that we call with a professional term emission. The bank also issues money by buying foreign currency for forints. On the other hand, the amount of cash decreases when the owner of an account (for example, a retail-trade enterprise) deposits its income in its bank account. In this case, the amount of the banking account money grows but the total in circulation in the economy remains unchanged. The money in circulation decreases also when the bank sells foreign currency for forints. The total amount of cash in circulation changes subject to the fluctuation of the bank's balances of outlays and receipts of cash.

The balance sheet of the money-issuing bank reflects the amount of money in circulation—both banknotes and coins—in a given moment. This is not the money at the bank's counters or in its treasury. For—no matter how strange it might appear—the latter is not yet (or already not) money, but solely printed matter with value signs and on strict accounting. It becomes money as soon as it leaves the bank's counter and stops being money when it returns there.

According to the MNB's balance sheet of 31 December 1982, there were banknotes and coins in circulation with a total value of 87.3 billion forints. I.e., 6 billion forints more than a year earlier.

The income of the bank is constituted by the balance of the amount of interest received from its customers against the interest it paid itself. Other major items that affect its profit and loss account are commissions and expenditures. All this appears on the statement of income.

In 1982, the total amount of the bank's income and receipts was 57.4 billion forints, which yielded a profit of 7.5 billion forints. This is 3 billion less than a year ago. The decrease in profits was caused essentially by the fact that in 1982 the bank paid 9.4 billion forints more interest than in 1981 and its receipts were only 5.6 billion forints in excess of those in the previous year. For the forint value of the country's external debt service grew more than the income of the bank, which was raised by increases in domestic interest rates.

Finally the assembly meeting decided to turn over the 1982 income which amounted to 7.5 billion forint to the state treasury.

#### History of the MNB

Until the end of World War I, Austria and Hungary's banknote-issuing bank was the Austro-Hungarian Bank. For a few years after the dismemberment of the monarchy, banknotes were issued by the Royal Hungarian Banknote Institution. An independent issuing bank was founded in 1924 by Law No V of 1924 entitled:

"Law concerning the Establishment and License of the Hungarian National Bank." In terms of this law, "the state transfers its exclusive right to issue banknotes...to the bank." The MNB was established as a joint stock company with a capital of 10 million gold crowns. During the period between its foundation and the building of a socialist banking system it was only an issuing bank, in charge of issuing banknotes and related economic regulatory tasks. The bank had no direct credit and checking account relations with either enterprises or private persons since these tasks were performed by business banking--commercial, credit and savings banks.

The MNB was nationalized by Law No XXX of 1947 concerning "the nationalization of the shares in Hungarian possession of the Hungarian National Bank and the financial joint stock companies working under the authority of the First Court of the Penzintezeti Központ [Center of Financial Institution]." This law was promulgated on 4 December 1947.

The original functions of the MNB that included only banknote-issuing have been significantly amplified since its nationalization. Its commitments came to embrace the nationalized (and since then disappeared) commercial credit banks. Concurrently several other banks with special tasks have been established.

The areas of the MNB's activities were most completely defined by the "Decree-Law No 36 of 1967 Concerning the Hungarian National Bank." In terms of this law the bank--in compliance with its function of issuing banknotes--has to watch over the stability of the forint; by issuing banknotes and minting coins puts the necessary cash in circulation; works out the credit-policy directives and surveys their implementation; regulates the money circulation; accumulates gold, foreign-exchange and foreign-currency reserves; fixes the forint exchange rates of foreign currencies and the interest rate; participates in the drafting of laws of the macroeconomic management. Complying with its functions as a credit bank, the MNB grants credits to state enterprises and cooperatives; keeps the banking accounts and manages the clearing thereof. Its activities include the payment, credit and other financial operations of international trade and all other kinds of banking services. Aside from all this, the MNB exercises its elsewhere defined faculties of foreign-exchange authority, and performs certain tasks in the area of precious metal economy. This law also sets forth again that the bank "is a legal body that works in the form of a joint stock company. Its affairs are established by the general assembly and upon the government's approval they must be published." Decree No 24 of 1968 of HUNGARIAN GOVERNMENT (Government Gazette) published the laws of the MNB which are still valid.

The Balance Sheet of the Hungarian  
National Bank on 31 December 1987

Assets		Million Forint
1. Gold, credit-exchange and currency reserves, over-night credit		18,923
2. Loans		
a) Medium- and long-term		
- financial institutions	170,386	
- enterprises	185,733	
- budget	71,664	367,903
b) Short-term (12 months)		
- financial institutions	17,881	
- enterprises	114,260	
- budget	961	152,442
3. Various assets		33,461
4. IMF quota		15,530
5. Foreign-exchange revaluation		19,100
TOTAL:		647,631

LIABILITIES		Million Forint
1. Capital stock		6,000
2. Reserves		4,416
3. Deposits and other commitments		
a) Demand deposits		
- financial institutions	297,788	
- enterprises	46,103	
- budget	1,891	345,781
b) Over-night deposits		
- financial institutions	68,191	
- enterprises	79,646	
- budget	8,649	
- others	10,910	167,396
4. Banknotes and coins		87,307
5. Various liabilities		29,221
6. Profits		7,510
7. TOTAL:		647,631

The Income Statement of the  
Hungarian National Bank: 1982

<u>Refunds and Expenditures</u>	<u>Million Forint</u>	<u>Income and Profits</u>	<u>Million Forint</u>
1. Refunds in connection with the money circula- tion	1,022	1. Interest	51,892
2. Interest	47,349	2. Commissions	5,258
3. Commissions	449		
4. Administrative and other expenses	1,094	3. Expense and fee receipts	187
<hr/>		4. Other receipts	87
Total of refunds and Expenses	49,914		
TOTAL:	57,424	TOTAL:	57,424

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## ECONOMIC ACHIEVEMENTS IN COUNTIES SURVEYED

Budapest HETI VILAGGAZDASAG in Hungarian 2 Apr 83 pp 34, 35

[Designed article titled: "County Economic Achievements--A 'Most' Survey"]

[Text] Who has not a ready-made idea about which of the 19 Hungarian counties is the most industrialized, which is the most predominantly agricultural, which is the largest, the smallest, the most densely or most sparsely populated, where the most divorces and the most marriages are. Sometimes however it turns out that it was a delusion what we thought we knew most accurately, although it is also certain that the "most data" of one county or other reflect precise, well-known facts.

In the following we are going to try to piece together such sketches of the 19 counties by presenting a selection from the best and worst features of them. Our statistics reflect the 1981 situation--if not, it is specified. We found them in the county yearbooks of the Central Statistic Office's county administrations, in the Area Statistical Yearbook and several statistical pocket-books. It is not our intention to establish a sort of county rank of precedence, for between two "mosts" there are always several "almost mosts"--there are many which stand close to the worst and many which border on the best.

In the picture of several counties the extremes are the least characteristic; paradoxically they are the normal consequences of their potentials. And that the less developed status of the one or the other cannot be blamed on the lack of talents or the reluctance to work of their inhabitants is demonstrated by the fact that just in the counties regarded as backward the lucrativeness of industrial activities is generally excellent. For example in Szabolcs county each 100 forint invested in industry yields 114 forint, an amount similar to the profitability reached in the evidently most industrialized Veszprem county--i.e., the next best among the 19 counties of the state.

The progressive character of some other counties is shown by the fact that professionals, such as medical doctors, like to settle down in them, and they are visited by technical experts who do not increase their population but are indispensable at a certain stage of industrial development. This tends to confirm the fact that our survey is more characteristic for the country as a whole than for the individual counties.



#### Baranya

- the county in which there is a record number of medical doctors: 37-38 per 10,000 inhabitants
- the largest number of occupational sicknesses: 316-317 cases for 10,000 employed
- the greatest number of villages under 500 inhabitants: 183

#### Bacs-Kiskun

- the largest garden, orchard and vineyard area: 79,300 hectares
- the largest quantity of sugar sold by the retail commerce: 25,527 tons
- the greatest number of suicides: 7-8 per 10,000 inhabitants
- the largest Hungarian county with a surface of 8363 square kilometer

#### Bekes

- the highest average per hectare wheat and corn yield: from 4.9 to 7.0 tons
- the lowest number of white collar workers in agriculture: 24-25 per 100 manual workers
- the highest number of people over 60: 19.8 percent of the population
- the lowest number of marriages: 6.6 per 10,000 inhabitants

#### Borsod-Abaúj Zemplén

- the most populous county with 805,900 inhabitants
- it has the most concentrated industrial complex: only 1.2 percent of the manual workers are employed in enterprises with a maximum of 20 workers, while 74 percent are working in enterprises which have more than 500 employees
- industrial investment is here the least profitable: 6 percent
- the lowest share of the private, auxiliary and household plot farming in the sale of fruits and vegetables: 12.5 percent

#### Csongrad

- the biggest percentage of white collar workers: 37-38 for 100 manual workers
- the largest number of inhabitants per settlement: 4579
- the smallest number of settlements with at least community administration: 59

- the lowest ratio of apartments with at least two and a half rooms: 41 percent
- the largest quantity of vegetables sold: 174,580 tons

#### Eger

- the lowest number of people above 60: 12.1 percent
- the smallest quantity of apples sold: 597 tons
- the lowest percentage of workers employed in cooperatives within the socialist industry: 6.2 percent

#### Győr-Ménfőcsanak

- the largest share of the household plot, auxiliary and private farms in the sale of vegetables and fruits: 40.4 percent
- the largest number of workers employed in light industry: 26,851
- the largest number of people employed in the textile industry: 19,404

#### Hajdú-Bihar

- the biggest average sugar-beet yield: 46 tons per hectare
- the largest state-farm area: 89,200 hectares
- the highest number of beds in the local government nursing homes: 2,002
- the largest quantity of slaughtered sheep sold: 7,811 tons
- the largest number of criminal cases: 12 sentences for 1,000 inhabitants

#### Hegyes

- the late spring summer is the most expensive in this country: seasonal commodities are selling at prices 8.6 percent higher than elsewhere
- construction industry is the least profitable: on an investment of 100 forint there was a loss of 20 forint (exact number is illegible)
- the lowest ratio of criminal cases: 4-5 sentences for 1,000 inhabitants
- the smallest number of cattle: 22 for 100 hectare agricultural acreage

#### Komárom

- the smallest Hungarian county: 2,230 square kilometer
- the lowest child mortality: 15-16 deaths on 1,000 live-births within one year
- the smallest agricultural cropland area: 212,000 hectares

#### Vograd

- the least populous county with 239,200 inhabitants
- the largest ratio of white collar workers in agriculture:  
19-40 for 100 manual workers
- the most lucrative light industry: each 100 forint  
invested yielded 145 forint
- the smallest number of hogs: 74,000
- the smallest quantity of grapes sold: 12 tons

#### Pest

- the most densely populated county:  
152-154 inhabitants per sq. km.
- the highest percentage of white collar workers in  
industry: 42 for 100 manual workers
- the greatest electric energy consumption: 1,617  
kilowatt-hour per household
- the largest share of artisanship in the forint value  
of services: 77.5 percent

#### Gyergy

- the most sparsely inhabited county: 59-60 people  
per sq. km.
- the highest mortality rate: 15-16 per 10,000 inhabitants
- the lowest financial yield in the agricultural cooperatives:  
22,691 forint per one hectare cropland
- the smallest number of workers employed in industry:  
94 for 1,000 inhabitants

#### Szabolcs-Szatmar

- the lowest average earnings: the monthly income of  
people employed in industry is 3,692 forint and in the  
construction industry 4,073
- the lowest yields in agriculture: 2 forint per 100  
hectares in the state farms and 4 forint in the  
agricultural cooperatives
- the smallest number of medical doctors for 10,000 inhabitants
- the largest percentage of social investments: 372,374  
forint on one million
- the highest ratio of people who leave the county: 3,885  
emigres for one immigrant

#### Szolnok

- the slowest growth of the ratio of medical doctors for  
10,000 inhabitants: from 15 in 1970 to 19 in 1980
- the smallest number of unqualified kindergarten teachers:  
2.7 percent
- the largest investment in light industry: 932 million forint

#### Index

- the lowest ratio of social investments: 51.9% (social insurance)
- the smallest number of people employed in the socialist enterprise: 12,622
- the smallest number of children for one kindergarten teacher: 14.15

#### VII

- the lowest agricultural yield: 50 percent
- the most extensive network of dirtfree roads: 45.3 kilometers per 100 sq. km.
- the highest number of unqualified teachers in the district: 1.1 percent

#### VIII

- the smallest share of the artisans in social services: 47.7 percent
- the smallest number of people employed in industries of the local government: 1,805

#### IX

- the highest child mortality: 25-26 deaths from 1,000 live births within one year
- the greatest motor capacity: 79 kilowatt per hectare
- the highest ratio of unqualified kindergarten teachers: 12.5 percent

## ENTERPRISES SLAM DOOR ON REFORM SAYS ECONOMIST

Budapest HETI VILAGGAZDASAG in Hungarian 2 Apr 83 p 38

[Article by Otto Pirityi: "Fairy Tale About the Internal Mechanism of the Enterprises"]

[Text] Earlier we learned from animal tales, later from human tales. Now we learn from economic tales. Hopefully in 50 years these tales will be included into the columns: "It was written 50 years ago." They are addressed to posterity rather than to the present. It would be a pity to deprive our contemporaries from their dreams. As long as there will be things which are different from what they appear to be, there will be also windmills and quixotism.

It happened about 20 years ago that the spirit of reform took possession of our country. Upon hearing and reading about so many reform ideas our brains were wound up just as Don Quixote's had been upon reading many stories about chivalry. And as he, following the example of the errand knights, rushed in his noble enthusiasm to the help of the weak and defenseless, so also we started to reform everything we could lay our hands on.

On our road to conquest we occupied all areas and seized all fortresses with the sole exception of the enterprises. The reform of the economic mechanism stopped at the door of the enterprises. It still stands there. We have increased the independence of the enterprises and we wondered why this "sovereign lord" denied access to the reform. My house--my castle. The reform can do everything except to intrude in someone's private home.

The practice and eventually the concept of "unternehmen an sich" [undertaking in itself] has evolved. Many enterprises became "self-centered," "egotistic" undertakings, they do what flows from their own character. It is like the " Ding an sich" in Immanuel Kant's concept, i.e., it is unfathomable in its intrinsic substance. In order to get an insight into it we must first introduce some ordering principles from outside. Kant introduced in his system the categories of space and time. We put into our enterprises the categories of profit, market, entrepreneurial interest and autonomy as regulating principles. But order has still not emerged from the alleged chaos.



Our enterprises received the regulating principles with fondness and understanding. It is a question of good manners to accept everything that comes from above. And since they were unable to comply with those principles without prejudice to their internal order, they started to simulate. The workshop pretended to be a plant, the plant being a factory unit, the factory unit being a factory, the factory being an enterprise, the enterprise headquarters being a trust and the trust being a branch of the national economy. If we feign on macroeconomic level that we have a market, free competition, a flow of capitals and profits, why could a unit with autonomous accountability not simulate that it is an enterprise. Why could it not feign to have its own production, profits, prices, autonomy and interests endemic to an enterprise?

It is wrong to resist to something which is good. If the state wants it so it should be so. Not in reality but in the appearance. Meanwhile the internal mechanism of the enterprises—not the sham one but the real—functions in accordance with its own rules. Programming, preparation for manufacturing, keeping the record and acquiring materials, fixing the material and work norms, working out the previous and a posteriori calculations, the business accounting charts and work indexes, all these have been started and are running their way in agreement with decades long practice. The mechanism is turning and a few people who are aroused into doing this are dismantling the almost non-existent enterprise, are increasing nominally the autonomy of the units, are demonstrating their profits and bless them with index numbers and competitive market symptoms. For not only the facts are right, the principles must be right too.

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## FUNCTIONS OF NOVOTRADE COMPANY CLARIFIED

Budapest HETI VILAGGAZDASAG in Hungarian 2 Apr 83 p 2

[Letter to HETI VILAGGAZDASAG by Josef Szilagyi, business manager of Novotrade RT.]

[Text] At a meeting of the Small Businessmen Chapter of the Hungarian Chamber of Commerce our firm was represented by Geza Szilagyi, our manager. The remarks of our colleague were probably not accurate enough and they caused severe misunderstanding in a one minute interview entitled "Moneyed Partner" which was published by you on 19 March. Therefore, we wish to clarify the misunderstandings by the following:

Our joint-stock company was founded on 1 January 1983 as the successor of AGENTCOOP Gazdasagi Tarsasag (AGENTCOOP Business Company). The founders were: Allami Fejlesztési Bank (State Development Bank), Kozponti Valto-es Hitelbank RT. Innovacios Alap (Innovation Fund of the Central Draft and Credit Bank), as well as the former owners of AGENTCOOP, among them the Magyar Kulkereskedelmi Bank (Hungarian Bank of Foreign Trade). Other shareholders are: agricultural cooperatives, state enterprises, industrial cooperatives and foreign trade enterprises. The capital of our company is 75 million forint, the nominal value of one share is 250,000 forint. The three banks subscribed to the majority of the stock. We wish to emphasize that we cannot use our capital for granting credits since a development enterprise cannot perform banking functions. We plan to use our fixed assets for licenses, the introduction of import-substitute and export promoting new methods and new technologies, as well as for innovations proposed to us within the framework of the energy-rationalizing program, series manufacturing projects and possibly leasings. In case of a good proposal we make of course no difference between private persons, small undertakings or large enterprises. We want to serve good causes by financial means.

The official proceedings concerning the license of our joint stock company are still in process and thus we do not have the right to do business in foreign trade. Yet this does not mean that, if there is a possibility and our commitments justify it, that we would not apply for permission to undertake such business.

It would contravene the existing economic principles and laws in force if we would offer our shares on sale to private persons and small undertakings. We made no application to any authority in this sense and we do not intend to do so in the future.

We also wish to make it clear that we have left our colleagues, manager Teia Szflandri to account for the ambiguous information he provided. For his statement which was the cause of misinformation we wish to apologize.

12317

CSG- 25/06/2000

# PERFORMANCE, BENEFITS OF ENTERPRISE WORK ASSOCIATIONS EVALUATED

Budapest *MAGYAR HIRLAP* in Hungarian 23 Apr 83 p 6

Article by Zoltan Koman, director of the Academy of Sciences Research Group for Industrial Economics: "What Are Enterprise Business Work Partnerships Good For?"

**Text** The government decree which made possible the formation of VGM [Enterprise Business Work Partnerships] that operate with the means of the employing enterprise appeared on 1 January 1982. In the course of the year, 2,776 such units were established, 1,457 of them in industry. Amid debates, their number continued to increase this year, but in such a way that there are still some large enterprises entirely without or with only a few VGM, while there are others with 100 or more.

Only several tens of thousands of persons are working in this organizational form, but their activities and additional income are being directly and attentively observed by many hundreds of thousands of workers. This is the reason why public opinion--and particularly that of the industrial workers--is concerned primarily with the operation of these organizations, even though the VGM is only one type of the new economic organizational forms (specialized coop groups, fixed-rate-payment units, and business work partnerships formed by private persons are of similar numerical importance).

## Does Not Affect Socialist Property

With on-site visits through the Industrial Economics Research Group of the MTA [Hungarian Academy of Science] and with the help of the county organizations of the Hungarian Economic Society, we obtained an overview of the initial operation of 600 VGM at 25 provincial enterprises, and we discussed our experiences at a conference. On this basis, I shall try in the following to give a picture of what characterizes the activities of the VGM's in industry, what led to debates, and what kind of statement we can make on their operation thus far.

Most of the VGM's in industry operate within the basic activity of the given enterprise. They mainly carry out those tasks for which it is difficult to provide manpower or overtime because of unfavorable working conditions or the requirements of special expertise. Smaller numbers perform

and other services, repairs, maintenance, tool and packaging production, and so forth. They frequently take work over as done previously by great enterprises. For the most part, they are linked with external production via their enterprise. To a significant extent, this is the nature of their work is tied by no more closely with the main activity of the enterprise and frequently requires cooperation, collaboration and adjustment with those workers who are not members of the VOM (such as those in production, storage, marketing, administrative, and so forth). It appears that neither those who drew up the decrees nor enterprises that have VOM's completely took into account this characteristic of industrial enterprise work (something which is frequently the source of friction).

As the VOM which have been established thus far, it is primarily manufacturing, assembling and business ideas which may be regarded as the entrepreneurial elements. They never (or only to a negligible extent) bring their own assets into the associations, and they rarely have to assume risks. Most of the VOM in industry are thus characterized as being work organizational forms that are free from the limits of wage regulation, are structured in writing, are flexible and operate by using the means of enterprise, and thereby they permit great scope for the independence and initiative of the workers but operate in harmony with the enterprise work plan and organization.

This also means that the VOM do not affect the essential features of socialist property relations and socialist management.

Cannot be guaranteed to everyone

It is an important result that the productivity of work conducted in the VOM is always higher than that of work performed in regular working time, often 10 to 20 percent and sometimes 50 to 100 percent higher. This difference can be explained by the fact that it is regularly the workers capable of greater achievement who join the VOM; they turn away from considerations that motivate restraints on achievements, they manage their time better, and they organize their work with greater independence and efficiency.

The VOM workers achieve 1.5 to 3 times more earnings per hour than is achieved in regular working time. This is partly the result of their higher achievement and partly of overtime payment. In some cases, the basis of calculation is the price offer of the external business, and therefore profit also accompanies their wages (often to a significant degree).

This supplements the monthly income of the VOM members in varying ratios, depending chiefly on how much additional work they undertake. Sometimes this appears to be excessively great and leads to disputes. But the problem of working time and free time points beyond the scope of the VOM. According to the data records of the KGB [Central Statistical Office], the ratio of work performed on auxiliary farms and in building-repair work—the two largest supplementary activities—was 36 percent as compared to manpower use in regular working time. In comparison to this, the total time demand of the



VCM is not undesirable, but in the broader social relationship the question it will be important (and in some cases also difficult) to solve enterprise—workers—and in my opinion correctly—that for the preservation of their health and work performance in regular hours the worker must be the decision of their workers in respect to how they manage their working and free time to the extent that the possibility of undertaking excessive extra work will be avoided. Beyond this, the worker may use his free time, if he wants to, for other jobs.

The workers are satisfied in general with the VCM and their organizations (unions)—only with the complexity of the provisions of the decree in question. The other workers have two main objections. One is that if the VCM are the household farms of industry, why every worker does not receive the opportunity to participate. It seems to me that the comparison leaves out of account some essential differences and is, therefore, misleading. In the work, household farming is possible for everyone who has the land that is necessary, or acquires it. Participation in the VCM cannot be guaranteed to everyone who is on land, because its extension at a given enterprise is limited and, on the other hand, the opportunity can be given only to those for whom work there exists or can be created a demand. Equality of opportunity should be avoided in this area.

The other question of importance is: Why is it not possible to work 40 hours in regular working time as in the VCM? The answer to this is simple. If it is true (the work in question could be performed only in overtime (which is always paid more), or there is an earned entrepreneurial reward in the greater income. If neither condition exists, only the present system of wage regulation sets limits to the performance of the work in regular working time—and the enterprise management or the system of economic management is naturally faced with criticism.

#### Role of the VCM

The VCM system gives the enterprise management the possibilities for maneuverability. It is the source of extra income: it helps to hold maneuver, and it may bring additional profit. But at the same time, its adjustment into the work order of the enterprise and solution of the problems that result also bring additional tasks. Therefore, it is advisable that together with the social organs, the enterprise management should carefully study its introduction and especially take care of its extension or adaptation.

But above all, the VCM system is a challenge to the enterprise management because it says that most of the workers are capable of achievements that are considerably greater than those at present; it is possible to differentiate state earnings; the voluntary association of a work force works at a high degree of organizational independence and initiative for the social collective within the enterprise also bring greater initiatives and the spirit of economic responsibility. In case of these enterprises, which are not self-sufficient and have been reorganized, may employ the entire work organization and management of the enterprise, if the management responds to the challenges.

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PROJECTED URBAN MASS TRANSIT GROWTH THROUGH 1990 REVIEWED

Warsaw MOTORYZACJA in Polish No 9, Dec 82 pp 253-258

[Unsigned article: "Developmental Prospects of Transport Until 1990 With Allowance for the Long-Range Concept of the Public Transportation System (Mass Transit)"; passages enclosed in slantlines printed in boldface in the original source]

[Text] /The previous issue of MOTORYZACJA contained the first part of a review of the program drafted by the Ministry of Transport and the Ministry of Local Economy and Environmental Protection concerning the development prospects of transport, including a concept of the public transit system until 1990./

/As we already informed our readers, this program was prepared upon a recommendation of the Council of Ministers, which obligated the heads of both ministries to take steps to develop public transportation despite the economic difficulties, so that the problems of commuting to work in cities could be solved./

/The materials presented below represent the second part of this study, in which attention is focused on the situation and forecasts regarding mass transit./

/Next month we shall familiarize our readers with the problems of transit service in the country's largest urban centers as well as with the recommendations ensuing from the program./

Urban transit operates in 227 cities with a combined total population of 16.5 million in 28 provinces (except the Siedlce Province). All these provinces have bus service, plus trolley service in 13 provinces and trolleybus service in 2. In 1981 urban transit services were used by about 7.7 billion passengers (about three times as many as those using State Motor Transport [PKS] and six as many as those using Polish State Railroads [PKP]).

In the late 1981 urban transit operated 17,873 rolling-stock units, of which 12,826 buses, 4,867 trolleys and 180 trolleybuses.

One third of the entire transit capacity is concentrated in the two largest urban centers, Warsaw and Katowice, while another one-third is found in seven large

urban centres (Bydgoszcz, Gdansk, Krakow, Lodz, Poznan, Szczecin, Wroclaw) and one-fourth, in 23 middle-sized provinces, and the remainder, one-twelfth, in 16 small provinces.

In 1981 the technical readiness indicator of the rolling stock averaged 70 percent for the country as a whole as regards buses and 73 as regards trolleys (compared with 76 and 83 percent, respectively, in 1980). Urban transit services are provided chiefly by means of surface transit, "sensitive" to technical conditions and street traffic. The technical condition of quite a few urban streets is unsatisfactory and does not meet the requirements of modern traffic. This concerns both the road surface, which on many segments results in dangerous driving conditions, difficult to accept by motorists, and the technical condition of engineering facilities which have increasingly often to be curtailed or closed to traffic.

These unfavorable technical conditions of the urban road net are compounded by difficult traffic conditions. Although they account for only 17 percent of the public road network, urban areas are the sites of more than 50 percent of vehicular transport operations and of about 60 percent of accidents as well as of a definite majority of road collisions. The recent fuel restrictions have, to be sure, reduced the volume of traffic in absolute figures, but they also resulted in increased disproportion between urban and non-urban road traffic.

On a much smaller extent than traffic on the remaining road network, but on the other hand the number of accidents in cities increased significantly.

Thus, urban transit, operating under such difficult conditions, is affected by unfavorable external factors as well as by systemic shortcomings and technical problems associated with the operation of rolling stock.

#### Transport Policy

Cities are areas with considerable population and workplace density as well as with great social and economic needs. Transit service, and especially meeting the needs of commuting to work, is of particular and steadily growing importance in cities. In large cities the problem is not only commuting to work but also the time lost on commuting and the conditions of commuting. Hence, the quality of transit service indisputably influences the quality and productivity of labor and the general public mood.

So long as free use of own vehicles had been possible and spread rapidly (until 1980), public transit handled 85-90 percent of non-pedestrian trips. This means that intra-city travel of a majority of the public hinges directly on the quality of urban transit. This matter is particularly important now that an overwhelming

part of the public lacks, and will continue to lack for many years, opportunities for regular use of private motor vehicles.

The experience so far as well as domestic and foreign studies have provided the principal premises for formulating the long-range principles of urban transit policy. Thus, the thesis of the dominant role of collective transportation in handling urban passenger transit has been adopted. This thesis is justified by the facts presented below.

The experience of countries with extensive use of private motor vehicles indicates that problems of urban transportation cannot be solved exclusively by means of such vehicles. The use of private passenger cars entails--despite its uncounted benefits to the user--increasingly greater social cost. A growing part of urban areas has to be allocated for streets and parking lots, the cost of road investments increases in mathematical progression as the population density increases, traffic-induced noise and air pollution are growing, and the heavy passenger car traffic paralyzes the traditional mass transit as well as the movement of delivery vehicles.

The greatest social and economic advantages as well as energy savings are yielded by the development of urban mass transit in all of its forms; in large cities and urban centers giving priority to this form of transportation is becoming a virtual necessity.

Considerations of energy conservation and environmental protection render it necessary to promote broader expansion of electric traction in the form of:

--conventional trolleys;

--express trolleys, regarded as an interim or emergency solution until subways are built;

--subways, as the sole rational solution of transportation problems in the largest urban centers;

--trolleybus transit, especially in cities where environmental protection is highly important.

And hence, a rational transit policy should consist in basing transit systems in cities and urban centers on three zones with differing proportions of tasks of public and private transport:

--in zone A--the central zone, with an extremely dense street network--the principal transport role should be played by public and pedestrian transit; passenger car traffic should be restricted;

--in zone B--the intermediate zone with an average street density--both an efficient public transit and an adequate road system are needed;

--in zone C--the outer zone with a low street density--there are no difficulties in adapting the capacity of roads and parking lots to the needs of passenger car traffic and hence public transit in that zone may coexist with private transit.

The idea of three zones is rational not only from the functional and environmental standpoints but also from the economic standpoint. From these general principles emerge the guiding principles of urban transit policy which shall apply to various areas until the year 2000.

Urban Centers and Cities With a Population of More than 100,000

--in zone A absolute priority should be given to public transit and pedestrian transit as well as to the transport serving that zone (goods deliveries, refuse removal).

Passenger car traffic (especially for commuting to work) should be restricted by, among other things, eliminating through traffic, siting parking lots appropriately, and employing traffic control measures (e.g. limiting the access of vehicles to the zone).

--In zone B a parallel development of mass transit and an efficient road system is needed. In the most traffic-intensive areas public transit should be separated from private transit or be given special privileges.

--In zone C the road system should be adapted to roads on the premise of free use of private passenger cars. Areas within this zone should be at the same time served by a modified public transit system assuring convenient access to zones A and B.

--Thus, the public transit system in urban centers will consist of:

(along the principal directions of passenger traffic)--rail transit: suburban railroads, subways, express trolleys and conventional trolleys, plus

bus transit, regarded as a complement to rail transit in less dense areas.

--Integration of transit subsystems is needed in the form of, among other things, efficient coordination of various means of public transit (at transfer points) and the provision of possibilities for cooperation between public and private transport (in the "park and ride" system).

#### Cities With Population of From 100,000 to 500,000

--Zone A--if it is at all necessary to isolate it--may be small in area (normally comprising the downtown section or its parts under heavy pedestrian traffic).

--Zone B will comprise the central area; the remainder of the city can be considered zone C.

--Public transit will operate in the form of:

Conventional and express trolleys (especially in zone B);  
Trolleybuses, chiefly in areas where environmental protection is of special importance;

Buses, to be given priority in zone B (through isolation of traffic belts, streets and other areas).

#### Cities With Population of From 50,000 to 100,000

--In these cities a broad application of the three-zone principle is unnecessary. It may though be expedient to isolate in the downtown area alone a pedestrian mall and give priority to public transit.

--Buses will be the principal means of public transit. When so warranted by environmental protection, trolleybus transit may be employed.



Towns with population of up to 50,000

--In such towns there is no need to restrict passenger car traffic (apart from the sections of the downtown area and within housing projects).

--In justified cases buses may be used as the means of mass transit.

#### Anticipated Transit Demand Through 1995

This forecast of the demand for urban transit until 1995 is based on the demographic assumptions formulated by the Planning Commission under the Council of Ministers.

According to these assumptions, in 1995 the country's population will be 49.1 million, of whom 26.8 million will live in cities. It is thus expected that the population of the cities served by urban transit will have increased by 100% in direct proportion to the overall population increase in the country; and that it may additionally increase owing to the establishment of urban transit in cities and towns that so far lack it. On the basis of the trends so far it is assumed that by 1995 urban transit will operate in an additional 30-40 towns whose population is below 50,000. Thus, by 1995 urban transit will serve about 21.7 persons in approximately 260 cities and towns.

Analysis of average mobility of the urban population in the last 20 years indicates that this is a fairly stable parameter that varies only within about 5 percent about its mean. It can thus be assumed that in 1995 the mean mobility of the population of the cities served by urban transit will be 460 trips per city dweller annually (the mean during 1960-1980 was 451).

In view of the trend toward smaller population density in downtown areas and the construction of large housing projects in the suburbs, urban-transit commuting routes will lengthen. On the basis of the studies and analyses so far it is assumed that in 1995 the average length of commuting routes will increase to 6.3 km from the present 5.1 km, that is, 20 percent.

It will also be necessary to reduce the overcrowding of urban transit. It is assumed that during the period until 1995 the overcrowding will be relieved only slightly, by means of a decline in commuting during the peak commuting hours on the most traffic-laden routes (to 6 from the current 7-8 passengers per square meter of free standing room). These assumptions indicate that, while passenger traffic in urban mass transit will have increased slightly during the period until 1995, the length of commuting routes will be greater and improvements in the standard of service will be needed. As a result, transit needs in 1995 will change as follows in relation to 1981:

--the number of passengers will increase about 30 percent;

--transport work, in terms of the number of passenger-kilometers, will increase about 50 percent;

--transport capacity, in terms of the total number of passenger vacancies in the rolling stock that is in operation during peak traffic hours, should increase about 100 percent.

Taking as 100 percent the mean indicator of the technical readiness of rolling stock, it is assumed that the transport capacity of urban transit in 1995 for the

Source: 1. World Bank report equal about 1990, 1990 report (page 20, 21, 22) that it would be about 10 percent greater than in 1991. Table 1 presents data on forecasts for 1995.

Table 1:

Subject	Year			
	1965	1975	1980	1995
Population (billions):				
Total	29.8	32.7	35.7	40.1
Urban	14.4	17.2	21.0	26.8
Percent of urban population	48.3	52.3	58.7	66.8
Number of urban dwellers served by urban transit:				
Percent of total urban population	63.9	66.5	77.6	81.0
In millions	9.2	11.4	16.2	21.7
[Translator's note: in the Polish original "Percent" and "millions" are reversed]				
Number of cities and towns with urban transit	149	181	226	ca.260
Number of passengers (billions/year)	3.6	4.7	7.4	10.0
Number of passenger/kilometers (billions/year)	15.0	22.0	37.3	63.0
Passenger vacancies in rolling stock (millions)	0.7	1.0	1.8	3.1

#### Notes:

For social and environmental reasons, track transit is expected to become very rapid. This is the case with the same time becoming modernized and improved. Along with express trolley transit based on rolling stock and high-speed city railroads running on dedicated routes, the aim is to build the transit system of transit transit in the combination of railroads, express in the transit cities. In this context, the assumptions for the year 1995 are as follows:

— modernization of second track on single-track lines (about 1000 km) and a full complement of rolling stock for Warsaw, Łódź, Katowice, Wrocław, Poznań, Gdańsk and Cracow;

— modernization of existing rolling stock in these cities and in other cities and industrial areas;

— modernization of express trolley routes in Warsaw, Łódź, Katowice, Wrocław and Poznań (more than 50 km);

— modernization of express trolley routes in other cities (Poznań, Wrocław, Katowice, Łódź, Wrocław and Poznań) and in other cities (Poznań, Wrocław, Katowice, Łódź, Wrocław and Poznań);

— modernization of the transit system of the cities and the commencement of the transit system of the cities (together 100 km).

1. The first part of the report is a general introduction to the subject.

2. The second part is a detailed description of the methods used in the study.

3. The third part is a discussion of the results of the study.

4. The fourth part is a conclusion and a list of references.

5. The fifth part is a summary of the main findings of the study.

6. The sixth part is a list of the names of the people who helped in the study.

7. The seventh part is a list of the names of the people who read the report.

8. The eighth part is a list of the names of the people who gave advice.

9. The ninth part is a list of the names of the people who helped in the study.

10. The tenth part is a list of the names of the people who read the report.

11. The eleventh part is a list of the names of the people who gave advice.

12. The twelfth part is a list of the names of the people who helped in the study.

13. The thirteenth part is a list of the names of the people who read the report.

14. The fourteenth part is a list of the names of the people who gave advice.

15. The fifteenth part is a list of the names of the people who helped in the study.

16. The sixteenth part is a list of the names of the people who read the report.

17. The seventeenth part is a list of the names of the people who gave advice.

18. The eighteenth part is a list of the names of the people who helped in the study.

	1981	1982	1983
1. 1981	100.0	100.0	100.0
2. 1982	100.0	100.0	100.0
3. 1983	100.0	100.0	100.0
4. 1984	100.0	100.0	100.0
5. 1985	100.0	100.0	100.0
6. 1986	100.0	100.0	100.0
7. 1987	100.0	100.0	100.0
8. 1988	100.0	100.0	100.0
9. 1989	100.0	100.0	100.0
10. 1990	100.0	100.0	100.0
11. 1991	100.0	100.0	100.0
12. 1992	100.0	100.0	100.0
13. 1993	100.0	100.0	100.0
14. 1994	100.0	100.0	100.0
15. 1995	100.0	100.0	100.0
16. 1996	100.0	100.0	100.0
17. 1997	100.0	100.0	100.0
18. 1998	100.0	100.0	100.0
19. 1999	100.0	100.0	100.0
20. 2000	100.0	100.0	100.0
21. 2001	100.0	100.0	100.0
22. 2002	100.0	100.0	100.0
23. 2003	100.0	100.0	100.0
24. 2004	100.0	100.0	100.0
25. 2005	100.0	100.0	100.0
26. 2006	100.0	100.0	100.0
27. 2007	100.0	100.0	100.0
28. 2008	100.0	100.0	100.0
29. 2009	100.0	100.0	100.0
30. 2010	100.0	100.0	100.0
31. 2011	100.0	100.0	100.0
32. 2012	100.0	100.0	100.0
33. 2013	100.0	100.0	100.0
34. 2014	100.0	100.0	100.0
35. 2015	100.0	100.0	100.0
36. 2016	100.0	100.0	100.0
37. 2017	100.0	100.0	100.0
38. 2018	100.0	100.0	100.0
39. 2019	100.0	100.0	100.0
40. 2020	100.0	100.0	100.0
41. 2021	100.0	100.0	100.0
42. 2022	100.0	100.0	100.0
43. 2023	100.0	100.0	100.0
44. 2024	100.0	100.0	100.0
45. 2025	100.0	100.0	100.0
46. 2026	100.0	100.0	100.0
47. 2027	100.0	100.0	100.0
48. 2028	100.0	100.0	100.0
49. 2029	100.0	100.0	100.0
50. 2030	100.0	100.0	100.0
51. 2031	100.0	100.0	100.0
52. 2032	100.0	100.0	100.0
53. 2033	100.0	100.0	100.0
54. 2034	100.0	100.0	100.0
55. 2035	100.0	100.0	100.0
56. 2036	100.0	100.0	100.0
57. 2037	100.0	100.0	100.0
58. 2038	100.0	100.0	100.0
59. 2039	100.0	100.0	100.0
60. 2040	100.0	100.0	100.0
61. 2041	100.0	100.0	100.0
62. 2042	100.0	100.0	100.0
63. 2043	100.0	100.0	100.0
64. 2044	100.0	100.0	100.0
65. 2045	100.0	100.0	100.0
66. 2046	100.0	100.0	100.0
67. 2047	100.0	100.0	100.0
68. 2048	100.0	100.0	100.0
69. 2049	100.0	100.0	100.0
70. 2050	100.0	100.0	100.0
71. 2051	100.0	100.0	100.0
72. 2052	100.0	100.0	100.0
73. 2053	100.0	100.0	100.0
74. 2054	100.0	100.0	100.0
75. 2055	100.0	100.0	100.0

**References**

The current status of the repair and maintenance facilities for urban private transport vehicles, collected only about 75 percent of the related needs, is very low. The expansion of these facilities proceeds at a much slower rate than the existing vehicle stock, and many of the fleets still are obsolete (e.g., some that were in use at the beginning of this century) and overcrowded, such that they cannot be adapted to new types of vehicle stock, a not possible.

Table 2. Estimated needs for the period until 1970 (approximate values). Perspective of the expansion of the fishing fleet. Expansion of the fishing stock fleet, these facilities will be able to handle 100,000 tons of fish in order to eliminate the backlog of fish. The number of workstations in the main rooms and the number of workstations will increase by about 10 percent. Table 2.

Type of Vehicle	Repair and Maintenance		Total
	1981	1982	
Tram	10,700	18,700	
Tramcar	4,400	7,700	13,100
Tramcar (new)	150	1,100	1,250
Total	15,150	27,500	42,650

It will be necessary to build 100-150 new tramcars and 100-150 new tramcars in Warsaw and Łódź and 100-150 new tramcars in other cities.

### 3.1.1.1. Construction of Rolling Stock Production

Rolling stock production will require about 100,000 man-hours per year.

It will be necessary to build 100-150 new tramcars and 100-150 new tramcars in Warsaw and Łódź and 100-150 new tramcars in other cities. It will be necessary to build 100-150 new tramcars and 100-150 new tramcars in Warsaw and Łódź and 100-150 new tramcars in other cities. It will be necessary to build 100-150 new tramcars and 100-150 new tramcars in Warsaw and Łódź and 100-150 new tramcars in other cities.

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[illegible]

1. The aircraft was operated in (minimum) 100% manual mode with the autopilot disengaged from both the pilot and passengers.

[illegible]



The main objective of the study is to determine the most appropriate technology and equipment for the proposed project, taking into account the local conditions and the requirements of the project.

The study is divided into three main parts: (a) a general study of the project, (b) a detailed study of the project, and (c) a financial study of the project.

(a) The general study of the project is divided into two parts: (i) a study of the project area, and (ii) a study of the project requirements. The study of the project area is divided into two parts: (i) a study of the physical environment, and (ii) a study of the social and economic environment. The study of the project requirements is divided into two parts: (i) a study of the technical requirements, and (ii) a study of the financial requirements.

(b) The detailed study of the project is divided into two parts: (i) a study of the project design, and (ii) a study of the project construction. The study of the project design is divided into two parts: (i) a study of the project layout, and (ii) a study of the project equipment. The study of the project construction is divided into two parts: (i) a study of the project materials, and (ii) a study of the project labor.

(c) The financial study of the project is divided into two parts: (i) a study of the project costs, and (ii) a study of the project benefits. The study of the project costs is divided into two parts: (i) a study of the project capital costs, and (ii) a study of the project operating costs. The study of the project benefits is divided into two parts: (i) a study of the project direct benefits, and (ii) a study of the project indirect benefits.

The study is based on the following assumptions: (a) the project area is suitable for the proposed project, (b) the project requirements are realistic, (c) the project design is feasible, (d) the project construction is possible, and (e) the project costs and benefits are accurately estimated.

The study is a preliminary study and is subject to change. The study is intended to provide a general overview of the project and to identify the main issues that need to be addressed in the detailed study.

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Date: \_\_\_\_\_  
 Page: \_\_\_\_\_  
 Sheet: \_\_\_\_\_

<b>Section 1: General Information</b>					
Item No.	Description	Unit	Quantity	Rate	Amount
1	...	...	...	...	...
2	...	...	...	...	...
3	...	...	...	...	...
4	...	...	...	...	...
5	...	...	...	...	...
<b>Section 2: Material Details</b>					
6	...	...	...	...	...
7	...	...	...	...	...
8	...	...	...	...	...
9	...	...	...	...	...
10	...	...	...	...	...
<b>Section 3: Labor Details</b>					
11	...	...	...	...	...
12	...	...	...	...	...
13	...	...	...	...	...
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<b>Section 4: Equipment Details</b>					
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and the *Journal of Management* is a journal devoted to management with the highest impact factor. *Management Science* is a journal devoted to management, is ranked 1st in the field of management science (1999), and it will improve its journal impact factor (1999) and the *Journal of Management*. Thus, management (1999).

## CUSTOMS REGULATIONS, PROCEDURES DISCUSSED

Warsaw SZTANDAR MŁODYCH in Polish 8 Mar 83 p 3

/Interview with Kazimierz Prośniak, chairman of the Main Customs Bureau, by Jacek Swidzinski: "An Instrument Called Customs"/

/Text/ /Question/ Mr Chairman, I am under the impression that the Polish customs system is much more complicated than, for example, the French system. In France, no one cares whether a certain commodity is imported from abroad by an individual or by an enterprise or from what payments area it comes. If there is a customs duty to be paid then it's so and so much.

/Answer/ However, the entire French economic system differs from that of Poland as well. The existence of two types of turnover, commercial and noncommercial, is also trying for us /customs agents/. In the future, there will be only one type of turnover, however, not at this time because we have more pressing matters to take care of.

/Question/ Economic reform assumptions always talked about economic instruments which would be used by the state for the attainment of selected goals. These instruments were to be: taxes, subsidies, customs duties, etc.

/Answer/ In our work up to now, we applied the customs act from 1975. However, the introduction of the economic reform and its practice make many provisions of this act inconsistent with current needs. The issue of amending this act has been placed on the government's work plan for the first half of the year.

/Question/ Only its amendment?

/Answer/ We are hoping that our actively functioning Sejm will introduce this amendment this year yet because life demands it. However, there is undoubtedly a need for a new customs act and we are anticipating that such a legal act will appear sometime around 1985. Returning back to the amendment, I would like to say that the work on it is far advanced and that the draft of the amendment has been submitted for interministerial approval.

/Question/ What significance will customs have in the new economic system?

/Answer/ The main function of customs in trade turnover, since we are talking about it, is to exert an influence on the economic account of import decisions. For many years, especially following 1976, there appeared opinions that the collection of customs duties is nothing more than the transfer of money from one pocket to another. Thus, the tendency to the rather wide use of exemptions. This is true to the extent that customs fees flowed into the state treasury while at the same time, enterprises which paid customs duty also belonged to the state. However, this represented a distortion of the economic account. Currently, exemptions are allowed in exceptional cases and concern, for example, contracts which were entered into years ago and which are just now being implemented. We also have such cases, for example, in the sea trade segment of the economy. The new situation affecting enterprises does not allow for similar practices.

/Question/ However, this is not the only function of customs in trade turnover?

/Answer/ No. A second function of customs, although I must honestly admit one which currently is not yet being fully implemented, is to influence import efficiency. Simply put, the import trade is so limited as a result of a shortage of foreign-exchange that the customs tariff cannot play any kind of significant role here. However, in the future when economic animation will take place, this will undoubtedly be the case.

A third function which has been actively implemented for about 1 year now is the institution of "customs duty refunds". What this concerns, namely, is that if a manufacturer needs some sort of input from imports in the form of raw or other materials, coproduced elements or semifinished products for the production of goods for export, then he is entitled to a refund of the customs duty collected on this import. This is already functioning well while contributing to growing interest in export production. This concerns both state and cooperative enterprises.

/Question/ Perhaps this is a naive question or maybe even a provocative one: there are no customs tariffs on exports in trade turnover, however, an ordinary citizen must pay a stiff price when taking out various goods out of the country, if he receives permission to take them out at all. Many people cannot understand why this is so.

/Answer/ This should be obvious. We do not have a surplus of foreign-exchange and probably will not have it for a long time. Therefore, we must expand our export trade in every way possible. On the other hand, the individual citizen depletes the market, which is important to all of us, by taking goods out of the country.

/Question/ Another question in the same category: If President Reagan unilaterally revokes Poland's most favored nation status and thereby increases customs duties on Polish goods, why then doesn't Poland raise its tariffs on American goods?

/Answer/ The decision made by President Reagan constitutes a political move, although one which carries negative economic effects for us. This is how Poland presented this case on the GATT /General Agreement on Tariffs and Trade/ forum considering it inappropriate to take any retaliatory action.

Returning to the previous question: there is no need to worry about inefficient exporting since this matter has been settled with appropriate regulations on the basis of which the minister of foreign trade issues export licenses. Therefore, there can be no talk of an unlimited or unrestrained export trade.

/Question/ Let us, therefore, go on to the next question regarding foreign gifts.

/Answer/ We are dealing here with a new situation which developed recently and which, after all, will not last forever. We are, therefore, using temporary solutions. Gifts are exempt from duty.

/Question/ All gifts?

/Answer/ All those gifts which constitute necessities, above all, food, then clothing and all manufactured implements and agents for agricultural use such as tools, herbicides, and fertilizer.

/Question/ What if someone were to receive a tractor as a gift--would it also be exempt from customs duty?

/Answer/ We have not as yet had such a case but it would also be exempt from duty because the import customs tariff does not take in agricultural machinery or tools including tractors. However, an automobile sent in the form of a gift will not be exempt from duty. There are sporadic cases which are, however, occurring more frequently where goods intended for resale are coming in under the pretext of gifts in aid. In general, however, we are continuing to exempt from customs duty all gifts which "fall" into a category subject to customs duty. As an example, I would like to mention just one amount: last year, we exempted from duty gifts sent for the number one gift recipient, i.e. the Episcopate Commission, in the amount of millions of zlotys--an amount which would have had to be paid to the state treasury at different times. And this was only one of many such recipients.

/Question/ Let us now go on to that which is of the greatest interest to the average Pole--the so-called noncommercial turnover.

/Answer/ We have two tariffs in noncommercial turnover: import and export. The import tariff has been liberalized to such an extent that there are practically no customs restrictions on items brought into the country. And there is no limit in terms of quantity. Everything that is intended for consumption in a broad sense of the word is exempt from customs duty, especially everything which goes under the heading of food with the exception of alcohol and cigarettes. All clothing and material for clothing is also exempt. In other cases, if an excessive quantity does not indicate profit purposes of the shipment, the recipient generally does not pay duty. In total, more than 60 percent of various items are treated as duty-free.



/Question/ However, when it comes to items to be taken out of the country...

/Answer/ This is where there exist strong barriers based mainly on the institution of licensing. Practically speaking such licenses are not issued. Naturally, this involves the safeguarding of the domestic market.

/Question/ Such a system must be characterized not only by pluses...

/Answer/ Of course, we also have to deal with negative occurrences. The liberalization of goods brought into the country has opened the field for the activity of all kinds of schemers. As I had already mentioned in an interview for PAP, several dozen tons of chocolates were imported into the country and this took place without breaking any laws because chocolate can be brought into the country without customs duty in any amount. The same applies to coffee, meat, bacon and butter. I could give more such examples.

/Question/ In other words, I could arrive in Gdynia by ship loaded with food and I would not pay a single zloty in customs duty?

/Answer/ For the time being, theoretically--yes. However, this matter has already been presented to the government Presidium. Because some groups of people began to make huge profits from such an import customs law, the need arose for amending the regulations in this regard in such a way that the general intent would be left untouched, i.e. so that the citizen could receive or bring back from abroad that which he needs, while at the same time so that a dam could be placed on "crooked" business dealings. At the end of February beginning of March, these customs regulations will be presented for public approval.

/Question/ Couldn't the appropriate financial services handle these "package millionaires"?

/Answer/ They are handling them but customs duty must play its role here too. Let us take for example, foreigners who come to Poland clearly for speculative reasons. I have several examples here. For instance, a Turkish citizen who brought to Poland sheepskin coats valued at 3 million zlotys. According to the tariff in effect, he paid 60,000 zlotys. Is this compatible with public feeling?

I would also like to point out that the customs service has the obligation to inform the fiscal authorities about larger amount of imported goods if these goods are not taxable. The gentleman whom I previously mentioned who brought in chocolate from Prague by chartered plane and did not pay any duty, later paid several million zlotys in tax.

/Question/ However, there is always a certain element of doubt. Even if this someone makes a profit from this business, the chocolate in any case reaches the market and satisfies public need.

/Answer/ Yes, but this is very deceptive. From a social point of view it is inadmissible for one citizen to become rich easily at the cost of the work

efforts of hundreds of citizens. In any case, I would like to point out that no one brings in tons of meat, ham, or butter which are also needed because there is no profit to be made on this. Another aspect of this issue: in order to bring something in, something has to be taken out. This can be either another market commodity or foreign-exchange currency. Some of our tourists do not have a very good reputation abroad. Please keep in mind that such a market "supplier" breaks the rules on his own of not only our country but in many instances those of another country as well, and this represents political harm.

/Question/ The issue of high customs duties on automobiles is causing a lot of anxiety. It is difficult to buy an automobile in our country and in addition, automobiles on our market are not of very high quality, not to mention the fact that it is impossible to buy a diesel outside of the car exchange /gielda/. Why the high customs duties?

/Answer/ A year ago on 8 February, we introduced new duty rates for automobiles imported from abroad. What determinants played a role in the process of establishing such and not another tariff? I would like to call attention here to two factors: the exceptionally strained balance of fuel and the fact that Poland cannot turn into a dump for used cars from the West. After all, a great majority of the cars imported from abroad were already heavily used. Finally, let us honestly admit that the state needs foreign-exchange, therefore, the duty rates helped to a certain extent in directing public funds to domestic exports.

/Question/ Then, we shouldn't count on a reduction of customs duties on automobiles?

/Answer/ In my opinion, no. This course is justified.

/Question/ The last question, again a little provocative: the prevailing general opinion is that the state treasury is making enormous profits from customs duties.

/Answer/ A misunderstanding! The chief of French customs agents ensures one-fifth of all revenues for the budget of his country whereas last year, we turned in to the Treasury somewhat less than 27 billion zlotys for imports in commercial trade turnover and less than 3 billion zlotys for noncommercial turnover. Please compare this to the budget which is counted in trillions.

/Question/ Mr Chairman, thank you for the interview.

Photo caption /photo not reproduced/: We have 3,600 customs agents in Poland. That there is not enough of them is attested to by the long lines alone at border crossings. And yet, customs duty has to be collected.

9853

CSO: 2600/592

## PAY SCALE-PRODUCTIVITY RATIO BROKEN DOWN BY INDUSTRY

Warsaw ZYCIE GOSPODARCZE in Polish No 8, 20 Feb 83 p 3

[Text] The figures relating to earnings in socialized industry and market supplies of goods, presented in the table, may help us to assess the changes which took place in this area in various sections of the economy in 1980-1982.

First, a considerable increase in earnings is visible both in 1981 compared with 1980 and in 1982 compared with 1981. In 1981, compared with 1980, earnings in industry increased by approximately 100 billion zloty and market supplies--by only 90 billion zloty. But the increase in demand for goods was brought about not only by the increase in earnings in industry but also in construction and other sectors of the economy as well as increases in agricultural incomes and social services.

In 1982 the value of goods supplied to the market enjoyed a nominal increase of approximately 1.33 trillion zloty in comparison with 1981. The results of the price changes, however, came to 1.46 trillion zloty. In reality, then, market supplies declined by approximately 10 percent. But earnings in industry underwent a nominal increase of 180 billion zloty. There was also a considerable increase in nominal wages in other sectors of the economy as well as in nominal agricultural incomes and social services.

Various conclusions can be drawn from a comparison of the level and rate of growth of earnings and market supplies in particular branches of industry. It is possible to distinguish branches of industry in which the increase in earnings during 1982 compared with 1981 was much greater, only a little greater, and less than their increase in 1981 compared with 1980.

The first group includes the coal-mining, fuel, and metallurgical industries. A slightly smaller but still considerable rate of growth in earnings was recorded by electrical engineering, including the metal engineering, precision engineering, means of transport, and electronics industries. In the chemical and mineral industries, including building materials and glass, whiteware, wood, and paper, and also in the food industry, the rate of growth of earnings was minimal. And in light industry, particularly textiles but also clothing, the growth in nominal wages was lower in 1982 than in 1981.

# Earnings and Market Output by Subsector

Subsector	Earnings (in billion zloty)			Market output (in billion zloty)			Output per one zloty earnings (in zloty)		
	1980	1981	1982	1980	1981	1982	1980	1981	1982
Coal industry	55.7	75.1	128.3	15.3	14.2	54.6	0.27	0.19	0.43
Fuel industry	4.1	5.2	7.3	47.1	60.7	93.5	11.48	11.67	12.80
Metallurgy	26.7	31.1	41.0	6.1	7.1	14.2	0.23	0.22	0.35
Electrical engineering	124.8	149.0	192.2	177.8	184.0	325.0	1.42	1.23	1.69
metal eng.	23.7	27.6	34.2	52.6	49.1	85.0	2.22	1.78	2.49
engineering	20.3	48.9	64.1	51.1	18.3	40.0	0.37	0.37	0.82
precision eng.	6.6	7.9	10.9	6.9	7.1	11.4	1.05	0.90	1.05
means of transport	33.3	39.7	51.0	62.8	69.9	115.0	1.39	1.76	2.25
electrical & electronics	20.7	24.9	32.0	40.5	39.6	73.6	1.96	1.54	2.30
Chemical industry	24.8	30.5	40.4	119.1	118.4	183.0	4.30	3.83	4.53
Mineral industry	19.8	25.4	32.9	30.1	27.7	74.7	1.52	1.09	2.37
building materials	13.4	17.0	22.3	15.3	13.3	44.0	1.14	0.78	1.97
glass	4.5	5.9	7.5	91.	8.7	18.0	2.02	1.47	2.40
whiteware	1.9	2.5	3.2	5.7	6.3	10.7	3.00	2.72	3.34
wood	14.4	18.3	23.9	51.9	53.9	105.0	3.60	2.95	4.39
paper	3.7	5.0	6.5	6.3	5.8	13.4	1.70	1.16	2.06
Light industry	57.0	71.2	81.5	228.0	211.5	304.2	4.00	2.97	3.73
textiles	31.6	39.7	43.8	118.2	106.1	135.2	3.74	2.67	3.09
clothing	14.6	18.2	21.5	64.1	61.3	96.0	4.39	3.40	4.47
leather	10.8	13.4	16.3	45.8	43.5	73.0	4.24	3.25	4.48
Food industry	36.2	49.2	69.1	542.4	589.5	1264.4	14.97	11.98	18.30

There were also variations in the changes in the nominal and real volume of goods produced for the market by the branches of industry referred to above. The largest decline in both nominal and real terms occurred in light industry. The declining share of supplies from this industry in overall market supplies was also the result of the relatively low increase in the prices of these goods. Real supplies of food products fell to a lesser extent and their share of total supplies increased as a result of the relatively high increases in prices. Large variations also occurred in the real and nominal market supplies from the remaining branches of industry.

The table does not, however, allow us to draw direct conclusions concerning the justifiability of the level and rate of growth of earnings in this or that branch of industry. The coal industry, for example, gives relatively little directly to the market but determines the supply of energy to the entire economy. Individual branches of industry also have different shares in exports. In addition, market supplies come not only from domestic production but also from imports. The share of imports in supplying the market remained virtually unchanged during 1981 and 1982, at approximately 7 percent. But this share was distributed unevenly between supplies from individual branches of industry. In the majority of cases it did not exceed 5 percent; in the food industry it reached 6 percent, in electrical engineering and electronics--7 percent, in textiles--8 percent, in chemicals--15 percent, in means of transport--20 percent, and in precision engineering it was highest of all, reaching nearly half of the value of market supplies.

REFORM COMMISSIONER ADVISER BLASTS PLANNING COMMISSION STAFFER

Warsaw POLITYKA in Polish No 11, 12 Mar 83 p 6

[Article by Czeslaw Gawlowski: "Surprising Confusion About the Issue"]

[Text] An adviser of Minister Baka cannot agree with the adviser of the chairman of the Planning Commission.

The issues presented by Wlodzimierz Cymbala (POLITYKA 9) can be understood if they are divided into three groups. The first group contains the vague exhortation: "so that it might be better," which is something like: to more justly regard all citizens, insure the proper respect for each individual who works well, and create the best opportunities for any kind of advance, direct the socioeconomic policy toward the satisfaction of emergency and long-range development goals, lower costs, increase housing construction, perfect the agrarian structure, etc. This takes up a lot of space and could take up even more. Ba! All of this is extraordinarily valid; I myself would support all of this. Unfortunately, neither W. Cymbala's signature, nor mine, nor the signature of many others, can shift the issue even an iota.

The second group presents original thoughts, at times, so original that they scarcely hold up to scrutiny. The author does not hesitate to advance many "heavy gun" proposals. I would include among these large-caliber proposals the suggestion--resulting from his devotion to Polish tradition--calling for the creation of the office of district "starost" and the restoration of the "powiat" political subdivision, and this for the purpose of "bringing powers and the scope of responsibility more into line with the economic proposals which are formulated above." (?) What do local political and governmental agencies, tormented by endless reorganizations, have to say about this? After all, the 1975 administrative reform is hardly completed! The removals and revisions of its determinations continue even to this time. The implementation of the joint resolution of the State Council and Council of Ministers from November 1980 on the expansion of the powers of local agencies and administration has not yet been completed. These agencies are still converting, on a massive scale, for their new role as founding agencies for thousands of economic units; they are still studying the economic reform and are, finally, preparing to initiate, with great pains, the law on peoples'



councils and regional self-government, and they are preparing for the upcoming elections. I am omitting the issue of the gigantic costs of effecting such an operation (perhaps, the bill of political advantages is favorable). This is real Polish tradition--better to make any kind of change than to puzzle about a solution to real and pressing practical problems.

The author propagates also the necessity of acknowledging the ascendancy of the jurisdiction of the executive authorities over deliberative and regulatory bodies, concluding his argument with the statement that: "This results...from the aspiration to continue the process of democratizing public life." Another favored proposal of W. Cymbala is the appointment "of a State Economic Committee equipped with essential powers and responsibility under the chairmanship of the premier or his deputy." This year and a half after the dissolution of the Anti-Crisis Operational Staff, and after less than half a year after the dissolution of the Economic Committee of the Council of Ministers.... W. Cymbala considers most plainly the decisions to be improper, even though he himself declares himself for the standardization of state economic policy in another part of the article; he declares himself for strengthening the governors besides the strengthening of the competence of the sector-subsector minister two sentences further. All are strong in this context. Wouldn't the constitutional powers of the Council of Ministers and the government Presidium suffice? Or maybe this is just plain nostalgia?

For reasons known only to himself, the author suggests including investments, directed toward mobilizing inactive sites, and also the penal taxation of their nonuse, to obligatory tasks. How does this concern the directors of state farms, who once had to put up hog-fattening fodder and other fodder for import, and who today do not have any fodder subsidies and thus remain with empty buildings? What obligatory investment will guarantee them fodder or shoats? From where will they take this penal tax?

The next original contribution to the cause of "reforming reforms" is the proposal to appoint workers' self-government on the level of trade or on the national level--"in place of" the incapacitation of the very self-government in the enterprise. Following this and also from the point of view of strengthening the sector-subsector minister, mentioned above, there is the suggestion of restoring the associations. I will leave this one alone without comment.

All of these proposals and several others are, of course, startling and very fresh; it is difficult to assume an attitude toward them without deeper reflection. It is necessary to feel somewhat sorry that the author did not reveal such reflection in his statement. On this principle, one can fill a whole issue of POLITYKA with similar proposals. And our memory is already full of them.

#### Short Memory

Thus we come to the third group of issues. The most important issue of all is the answer to the question: How should the economy be directed under



conditions of economic reform? Here, W. Cymbala shows how far away he is from reform; this is revealed in his ignorance of the principles which govern it and are an indivisible part. Here is the evidence. In the first place, he often presents in his text the false thesis opposing economic reform because of central planning. I will cite several sentences from the "Directions of Economic Reform"; I will also cite the document adopted by the party's 9th Extraordinary Congress and the Polish Sejm. Here are fragments 31-43: "The operating mechanisms of the national economy will rest on three pillars, which are: collectivized planning on the scale of the entire national economy, independent enterprises, and the economic instruments of economic policy (...) This mechanism will join the public interest, which is expressed in the central plan and budget, with the interests of various social groups and organizational units [plants and equipment] of the economy. (...) Completely maintaining the position of central planning in the socialist economy, the principles of collectivized planning will be implemented. (...) Market categories will form a new system (...) a factor granting a specific direction to the activity of the economic units by targets of the central plan. (...) In the centrally planned socialized economy, the central plan is of particularly strategic significance, as the main tool in forming the socioeconomic development of the country." That should do. Although there is a directive on planning, there is no practical experience in planning.

And how did things work in the past? Let us remember from where the need to push reform came (theses 7 and 8): "Weaknesses and the failure of the current system of management and planning, defined as a system of orders-distribution, became evident. These weaknesses and the low effectiveness, reduced only in recent years, in all spheres of the management process led first to a halt and then, in the end, to a decline in the standard of living. The orders-distribution system was characterized by shortage (...) the independence of the enterprises ended and they were forced into hierarchical, multilevel organizational structures in which the basic instrument of direction activity was the orders made out at higher levels without the adequate consideration of social preferences and in isolation from the actual conditions of the enterprises' activity as a result of the lack of motivation which replaced directives and administrative procedures."

As it turns out, one can quickly forget about these facts.

It Is Difficult not To End up Dreaming

The author is trying to place W. Baka still more to the right than R. Reagan and M. Thatcher. And because of government orders, no less, which they have praised considerably, while their concept--I would not say it, if I did not know--originated with a government plenipotentiary on matters of economic reform. We are trying to tell the reader that reform is too energy-intensive for production and of lower quality, because it does not foresee the prohibitions of its conduct.

If only Cymbala had read more attentively the "Directions of Economic Reform," he would have discovered in thesis 74 the instruments of central

control (directly, indirectly, and organizationally) and, among many other direct instruments, such a note: "Concessions, licenses, prohibitions and the acceptance of certain types of ventures undertaken by the enterprises."

For other reasons, which have already been described above, there was a neatly formulated reprimand in the article, which had to win a significant number of readers, that reform deprived the headquarters--of the division--of the possibility of directing the Polish economy. These divisions are the associations. What the deuce, it needs to be recalled that the absolute liability of command is solely the proficient manner of leadership in the army, since this system not only initiates but also enforces the greatest knowledge, expertise, and staff-efficiency, as well as the hackneyed discipline of successive subordinate levels. These principles cannot be generalized. The author most clearly does not distinguish the essential mechanism of the proficient army nor of the proficient economy, in which the entangled material of relations, tempers and the most extensive intelligible social interests are entwined. Instead, W. Cymbala explained that he does not acknowledge anything other than the orders-distribution system of economic control. He immediately admits that for him control-ability is the direct line uniting the center through the sector-subsector ministry, the branch association, further through the province (maybe even the county?), the management of the enterprise, and all the way to the specific place of work. This stands in basic contradiction to the fundamental premises of economic reform.

Summing up, what do we find in the article "Less Leeway"? In the first place, an extremely rich aggregate of generally valid goals for socio-economic policy and the data of undertaking their realization (without trying to answer the question: How?). In the second place, several "new" propositions from a rather worn collection of experiments from past years make their appearance. In the third place, we find a bit of slander and accusation aimed at reform.

Indeed, esteemed adviser, surprising confusion of the issue is shown. This is the most burning question: Whether we will find the sufficient strength to overcome any obstacles and opponents on the road of action to a revival of economic life with so many different and many-sided threats. Especially today, I think that in this battle, before the confirmation of the final form of the National Socioeconomic Plan for 1983-1985 (that is, the plan for getting us out of the crisis), before adopting the program of anti-inflationary actions and, finally, before the evaluation of scarcely the first year of economic reform, much depends on the advisers and other staff elements, which prepare for their bosses the propositions for solutions, evaluations and decisions. It is impossible to deny the fundamentalism of these words. However, taking into consideration that Wlodzimerz Cymbala is the adviser to the chairman of the Planning Commission with the Council of Ministers, it is difficult not to start dreaming.

12247

CSO: 2600/614

## DEPUTY MINISTER DISCUSSES TRADE WITH SOCIALIST COUNTRIES

Warsaw RYNKI ZAGRANICZNE in Polish 22 Mar 83 p 8

[Interview with Wladyslaw Gwiazda, deputy minister of foreign trade by Eugeniusz Mozejko: "In the Circle of our Closest Partners: To Strengthen Favorable Trends"]

[Text] [Question] Mr Minister, trade exchange protocols for the current year, signed by Poland with the main CEMA partner countries, in general anticipate a small increase in [trade] turnover. Does this not augur a decrease in the growth rate of trade exchange with these countries.

[Answer] When assessing the growth rate of trade with CEMA countries, it is necessary to consider the fact that last year we noted a decrease in [trade] turnover with some of them. This year, all the signed protocols anticipate an increase in turnover. Of course, this turnover differs, being really minimal in some cases, but in some other cases it amounts in comparable prices, to over 10-12 percent. In total, imports are larger than exports. We are striving to increase our imports still further, but--it is obvious--within an appropriate structure, i.e., we are concerned mainly with raw materials and market goods. It is not easy to secure deliveries of these. We are reducing our investment imports; speaking plainly, we give up many items in the machinery and equipment group, whose deliveries were based on long-term contracts and earlier consultations. The resulting gaps are filled by us with imports of raw materials and of market goods. However, the capabilities of our partners in this area are limited.

[Question] Does the differentiated rate of turnover with individual [CEMA] countries alter in any way this position in our foreign trade?

[Answer] No, the position of the most important partners on the list remains the same. The assumed rates of [trade] exchange with individual countries result from the actual capabilities of our partners. When signing protocols we assumed that they must be firmly based on today's realities and that deliveries which were agreed on in the protocol should be guaranteed. We cannot have a repetition of past situations in which a protocol would include clauses which we were not sure of being able to implement. Being sure is particularly important today, i.e., in a situation in which there is often no possibility of securing alternate deliveries.

[Question] And so, is this caution based on past experiences? Did we, or our partners, have any significant problems with the fulfillment of our trade obligations last year?

[Answer] Unfortunately, we did. In our exports, for example, there "slip-ups," i.e., nonfulfillment of contractual obligations, in many areas. In any case, the value of nonimplemented deliveries was greater with regard to our exports than it was with regard to imports from [CEMA] partner countries. In imports, all deliveries of basic supplies, that is, raw materials and production materials were, in principle, implemented. There were very slight deviations from this. Of course, of basic importance here were imports from the Soviet Union, which were implemented almost 100 percent. The above caution, therefore, is partly understandable.

I should like to emphasize that in the years 1980 and 1981 we totally "let down" our partners. But last year represented, in my opinion, a beginning of the process of restoration of confidence in us as reliable suppliers and participants in economic cooperation within the framework of the socialist community. Our export commitments last year were implemented quite satisfactorily, which was acknowledged by the very consignees of our goods. We shall endeavor to strengthen this trend during the current year and in the coming years.

[Question] Are we striving to expand our trade relations also with non-European socialist countries, such as Mongolia or Vietnam? For example, the trade protocol which was signed with the People's Republic of China anticipated a large increase in turnover during this year already. This is possibly a heartening example.

[Answer] Of course it is. We devote considerable attention to our non-European partners. At present the volume of trade with them is not too large, but it is of considerable interest and importance as regards the goods structure. The possibilities of increasing this turnover have been limited up to now, but we, together with our partners, are striving to expand them.

[Question] In some of the signed protocols there were indications that efforts would be made to find ways to increase deliveries still further. Are these just perfunctory declarations of good will, or should we expect some concrete actions to follow?

[Answer] No, these are not perfunctory announcements. As early as last year, due to among other things western economic sanctions, we began rapidly to expand our nonquota trade in those goods which were included in plans for trade exchange with western countries. A part of deliveries of these goods was implemented within the framework of compensatory transactions in the turnover with our socialist partners. Similar possibilities are anticipated this year.

[Question] However, this results in an increase in trade operations which are cleared in free foreign exchange, and this, in the long run, does not seem to favor the growth of trade between socialist countries.



[Answer] These transactions are cleared in dollars as well as in rubles. This is a question of agreement. The type of foreign exchange is not a basic problem here.

[Question] Actually, what is involved is goods-for-goods exchange?

[Answer] In principle, yes--this also applies to free foreign currency clearing of accounts.

[Question] As early as last year, we could notice considerable changes in the goods structure of our trade turnover with the socialist countries. How do you, Mr Minister, assess these changes, and in what directions are they progressing?

[Answer] Indeed, for two years now there have been favorable changes in the structure of turnover with these countries--favorable from the standpoint of Poland and its market and supply needs. I should emphasize that such large-scale changes, in general, would not be possible under normal conditions. However, our trade partners regard them, in our particularly difficult period, as one of forms of assistance. We regard them in a similar manner. These changes consist in increasing deliveries of market and agricultural and food commodities and, wherever it is possible, also of raw materials. In the case of raw materials, these possibilities are, of course, limited. Nevertheless, even if we disregard the particular case involving the Soviet Union, we try to also increase our imports in this area from the remaining socialist countries. Owing to this, the share of the above-mentioned groups of goods, except machine industry products, in imports from these countries, has increased considerably.

On the other hand, our partners have agreed to a reduction of our market exports, although these deliveries--with the exception of the Soviet Union--have been, in any case, rather symbolic. At last, our trade partners have agreed to a reduction, on our part, of imports of machinery and equipment, without reducing their purchases of Polish machinery. As a result, the share of electric machine industry products in exports to the socialist countries has been nearly the same as last year, and in absolute figures it has increased. In the case of the Soviet Union this is a significant increase, while there has been a considerable increase in the share of supply-type goods in imports. This increase amounts to 73 percent. Obviously, we would like to strengthen these trends which are so favorable to us; but we should realize that this will not be easy.

[Question] What draws attention is the fact that in the most recent period we have not signed with our socialist partners any larger coproduction agreements which might contribute substantially to increasing also our trade exchange. Does this denote a slowdown in the growth of coproduction?

[Answer] It is certain that thus far we have not fully utilized the opportunities which are offered by coproduction. The share of coproduction deliveries in our trade turnover is, in my opinion, decidedly too small. But here also

we have to remember that we have just come out of a period of uncertainty which until quite recently was caused by the development of the situation in our country. And a partner's reliability is of particular importance in co-production deliveries. It is no wonder, then, that enterprises in socialist countries were not eager to sign any new agreements. Together with concerned industries, we are striving to activize this area to our cooperation through, among other things, direct contacts with specific enterprises. This has already brought results.

[Question] Regaining a good reputation as a trade partner should be of help in stimulating coproduction. Let us speak about the ways and possibilities of implementation of the guidelines of trade protocols for this year. What are the tasks and plans of the Ministry of Foreign Trade [MHZ] in this area?

[Answer] The main problem is how to assure regularity of deliveries of goods--both our and those of our partners. Thus, the main task is to obtain contracts and to assure, in contracts, delivery deadlines which would permit regular implementation of mutual obligations during an entire year.

[Question] During the implementation of trade protocols, will we not encounter tendencies to tie imports to exports, and not only with regard to totals but also within individual goods groups, which can have a braking effect on the growth of trade? If I am correct, such practices used to occur in the past.

[Answer] There are no such tendencies to speak about, although in the past there used to be occurrences of tying [imports to exports] in mutual-type deliveries. We are trying to eliminate these occurrences from our trade practice. After all, should we want to make the regularity of our exports, e.g., to the Soviet Union, dependent on imports from that country, we would, first of all, have to significantly increase our deliveries as early as the first half-year period in order to first equalize our imports from the USSR. The Soviet Union--as we well know-- implemented its deliveries last year with exceptional regularity, regardless of to what extent we were able to fulfill our obligations.

[Questions] Precisely this problem does not exist in our trade relations with the Soviet Union.

[Answer] As I have mentioned already, foreign trade enterprises at times did actually resort to a method of tying [export and import] deliveries, in order to extort imports--successfully in most cases--but this really cannot be utilized as an instrument of trade policy. In general, after all, there is not need for this, although in individual cases there may occur slowdowns and delays. This year--like last year--we urged all our socialist partners to assure regularity of deliveries, in view of our continuing difficult situation, and we received corresponding assurances. Now our concern is that both the Ministry of Foreign Trade and the enterprises utilize these assurances to provide contractual guarantees of regularity of delivery of needed goods.

[Question] In our supply situation, it would also be important to acquire the opportunity to implement some small purchases outside the protocols. Can our enterprises look to markets in socialist countries in this respect? And how should they go about securing such additional imports?



[Answer] All Polish enterprises of foreign trade as well as production enterprises, if they apply to the ministry for additional imports from the socialist countries, receive approval for such imports. I emphasize this because sometimes we hear voice demanding ruble allowances for financing purchases in those countries. In practical terms, any imports from the socialist countries can be implemented. However, the point is that such imports must be agreed on with a trade partner and an enterprise must have the equivalent of their value in zlotys. The search for additional possibilities to increase imports of goods needed by us from the socialist countries is a permanent task for our ministry. In recent years, particularly, the results of this search have been considerable. However, we should remember that a trade protocol is, of course, a principal document on which the implementation of our trade turnover is based.

[Question] What are the prospects for the implementation of the signed protocols? Can we already attempt some assessments on the basis of the January results?

[Answer] It is still too early to make assessments. January is an atypical month. We will be able to assess the progress of implementation after some three months have passed. For the time being I can state that we are satisfied with the trade protocols which we signed. I also think that their implementation is not likely to be less satisfactory than it was last year, and that it is likely to be even better as far as the Polish side is concerned. Thus, since our partners are not experiencing the same difficulties as we are, the total result should be a good one.

[Question] Thank you for the interview.

9577/747

# PERSISTENT FREIGHT CAR SHORTAGE TERMED VICIOUS CIRCLE

Warsaw RADA NARODOWA GOSPODARKA ADMINISTRACJA in Polish No 5, 7 Mar 83 pp 37-39

[Article by Janusz Walewski: "Railroad Cars on the Wrong Track"]

[Text] On the whole it goes like this: producers blame the railway for not transporting merchandise (some producers' storage areas are piled up with finished goods and semi-finished products, for instance cement plants collapse under heaps of cement, other producers' levels of inventories indispensable for production is appallingly low), the railway wants to transport, but it does not have the means, hence it blames the plants producing railroad cars for turning them out insufficiently. The plants cannot increase the production for it depends on steel quantity, technical facilities and manpower.

Against this emerging, thereby, vicious circle, the rest of the efficient railroad cars still keep running. Yet, the bottleneck of our economy-transport is already getting narrower.

The above representation is much oversimplified and requires a thorough running. I do not pretend to elucidate the whole problem, but I would like to give some points of view on this matter.

## Freight Cars

...may be divided into: --coal cars (uncovered), box cars (roofed) flat cars (without sidewalls); special-purpose cars, for example: tank cars, dump cars.

Currently, the basic problem for the railway is a shortage of boxcars and an excess of malfunctioning (out of commission--in the process of or waiting for repair) coal cars.

The railway received its last shipment of boxcars in 1978--90 units from the Repair Plants of Railway Supply [ZNTK] in Ostrowiec Wielkopolski. The year before the output volume amounted to 1,100 boxcars. In 1981 nearly 1,500 boxcars had to be scrapped. The average productive service life of such a

boxcar is calculated to be 32 years. The scrapped cars had been on the tracks for 28 years (the boxcars were too heavily damaged). In order for the transport of fertilizers, fodder, grain, bags of cement, to proceed at a relatively normal pace, the railway should receive annually about 1,500 boxcars.

In 1982 the railway received 52 boxcars--an advance on the series which went into production at "Zastal" in Zielona Gora. By the end of that year, the railway received 860 coal cars. The plan was fulfilled. The transport is being affected by an excess of malfunctioning boxcars. The boxcars not only malfunction, but also are improperly operated. The boxcars being damaged by users, shippers and receivers; they are being damaged even by railwaymen. The bad condition of the rails is also not without influence.

#### The Customer Is Always Right...

...he is so right that he cannot even nail a board down to a boxcar damaged by himself. He is so important that in numerous cases he does not work on Saturday and prefers to pay fines for delaying of the boxcars rather than guarantee the presence of the unloading brigade.

Most merchandise is unloaded by mechanical systems, frequently heavy equipment. This equipment is not adapted to this type of work, and does not correspond with the boxcars' parameters. But the customer works with what he has. This is true. It is also true that he works unskillfully and in a hurry (because of piecework remuneration).

It is estimated that 3,000 railroad cars are damaged daily. A notable exception to that among the customers is Warsaw's Steelworks.

Scrap metal, semifinished products, and limestone are delivered in 4,300-4,800 railroad cars per month. During unloading there are from 250 to 300 railroad cars damaged every month. To begin with there are minor troubles with car side rails, sidewall stakes, and planking when unloading coal cars by electromagnet. As for the box cars, the door is most frequently damaged. It happens that way for the door cannot be normally opened; the door is damaged and left unrepaired by the previous user. So, the next user has to take the door off and then re-install it. All damage (except for the damage to undercarriages, forbidden by the regulations) are repaired by Warsaw Steelworks on its own. After the introduction of the regulations compelling the repairing of railroad cars damaged by plants, a repair station was set up, in an economic way, in the place on the pick-up-return station at the Steelworks. The station is equipped with indispensable material, and notably, with turnbuckles, electric and gas welding-machines; it has a carpenter's shop. The works in the station operates on two shifts.

It is certain that if all users of the railways acted as the Warsaw Steelworks does, the PKP [Polish State Railways] would have even less trouble and the transport would be more efficient. As for the unloading, a similar problem exists for the loading, where an additional trouble has been the overloading of the railroad cars, inconsistent with parameters determined by the producers. The reverse situation happens too: the load of the supply has been fully utilized, and here also there exist significant transportation reserves.

## Hope in Shunters

The second essential reason for the damaging of the railroad cars are the switching works of the railwaymen during the shunting works. The technological level of these works has not changed since the 19th century. The point is that if a given segment of the freight ought to be divided into groups, then the freight is pulled by a locomotive up to a shunting mound. From the mound the railroad cars roll down to join the segment of the railroad cars, standing below; in order that the collision be less violent, a braking car is running along side of a rolling railroad car and at the appropriate moment puts braking blocks under the wheels. This type of work--dependent on the atmospheric conditions--is very dangerous. Besides, the work is not precise. Given the fact that there is a shortage of the switching personnel, notwithstanding its relatively high remuneration and inaccuracy of the work itself, it happens quite often that a rolling railroad car crashes with great force, hence damaging itself and the railroad car that it hits. Out of over 100 shunting stations--anywhere from 10 to 20 are equipped with remote controls for switching that allow a shunter to brake the railroad cars rolling from the shunting mound. Presently, the PKP assembles this equipment (1-2 a year) at the shunting stations. The remote control equipment, guaranteeing proper speed of railroad cars, ought to be installed at the 55 most important shunting stations. It will take a while. Thus, all hope lies in the shunters.

## Problems With Repair

In the 1970's the freight cars supply has significantly increased. The structure of the freight cars has changed also: there are more 4-axle and fewer 2-axle freight cars. At the railway supply repair plants the number of freight cars being repaired has not diminished, it even increased lately, but in consequence of the increased number of 4-axle freight cars the labor input to repair a single freight car as well as the consumption of materials are significantly greater. Also important is that the extension of the freight cars has not been proportionally accompanied by expansion of the technical-repair facilities. There is an accepted principle that large plants should make so-called seasonal repairs (depending on how frequently the freight cars run). Other units--railroad car shops of the PKP--ought to deal with current repairs, overhauls, and maintenance of supply. The shortage of skilled labor at the ZNTK causes railroad car shops to perform seasonal repairs. Annually about 100,000 freight cars should pass through the seasonal repairs. The ZNTK in 1982 received about 70,000; railroad car shops about 17,000. Still, there was not enough room for about 13,000 malfunctioning freight cars that need to be repaired; some are to be scrapped, but even scrapping has been slow at the PKP. In the current year the ZNTK has performed more repairs than planned, and in relation to 1981, the volume of repairs has increased by 7 percent, including 31 percent repair increase of 4-axle freight cars. The repair capacity of the ZNTK would have been greater if not for the shortage of manpower, materials, and equipment. For example, the number of the workers, in relation to 1981, has decreased by 5,000 (because of early retirement). The PKP attempts to attract new workers. As of 1 July 1982 it employed also 1,500 soldiers. It seeks to acquire new shops for freight car repair. The construction shops are also being taken over near Koluszki. Simultaneously,

work is being made more cost-efficient and production is being increased at existing shops. The shortage of manpower, however, is an obstacle. The machinery is not being utilized by two full-working shifts.

The deputy-director of the nonclass Freight Car Shops in Ostrow Wielkopolski, Mr Mieczyslaw Kazmierczak says: "We service, on average day and night, 120 freight cars. We replace wheel assemblies, springs, bumpers, repair car body. We cannot cope with the current repairs. Although we have the required equipment, there is a shortage of manpower and materials, construction steel, screws. At the freight car shops there are 450 persons working; there is need for 40-50 for current repairs, about 30 for inspection service. We accept everybody willing to work.

"The transportation of some merchandise on improper freight cars is an important problem. For instance, the boxcars are loaded with loose cement or lime. The cars get dirty and need to be washed and disinfected in order that they may later transport grain and foodstuffs. This state of affairs causes some freight cars to be temporarily out of use. We change," M. Kazmierczak goes on, "the labor organization. We introduce the so-called stream process of repair, which means that a worker does not come to a freight car carrying along equipment and materials, but a freight car will come up to groups of workers. This system will permit an increase in the number of repairs.

#### ZNTK--Better Efficiency and Organization of Labor

The repair plants of the Railway Supply in Ostrow Wielkopolski, is an enterprise with traditions, existing since 1919. From that time up to the early 1970's, says deputy-director for economic affairs, Henryk Frackowiak, people of this region, have been eager to work at the ZNTK. Nowadays, the basic trouble for the plant is a shortage of manpower. In the first half of 1982 there were 800 workers employed, less than in the same time of the previous year. Particularly there is a shortage of manpower at the blacksmith's shop: a job which is highly paid but most difficult. The average wage at the ZNTK is presently the highest in the Kalisz Voivodship. In addition, the workers are entitled to the same services as railwaymen. Unfortunately, concludes the director, it is not more appealing to youth. The lack of workers is alleviated by...women, who account for a quarter of the crew, and the occupation of a metal-welder is completely dominated by them. The army helps also. In 1953 the plant began to produce the railroad cars: technical, box, and coal cars. In 1981 the production was stopped and from that moment the concentration has been on the repairs. At the ZNTK, seasonal and so-called heavy repairs are being performed. In the 10 months of 1982, even with a decrease in employment, there were 900 more freight cars repaired in the same period of 1981. Consequently, efficiency has increased, though in a forced way, having been provoked by the shortage of manpower. But, as director H. Frackowiak states, a lot of changes took place at the plant.

Recovery of spare parts has been significantly augmented; the sockets covering spare parts have been extended. In the current difficult situation as to materials, given the fact that the ZNTK in Ostrow overhauls all freight cars of the so-called white supply as well as half of the 4-axle and 2-axle coal cars,



it is a favorable phenomenon. Moreover, as the ZNTK used to be a producer, repairs are being created from the elements that were once cast off, for example, bumpers, spare parts, which after slight technical adjustments can be utilized again. The use of wood has been rationalized also. All these facts demonstrate that despite reduced material allocations the plants could increase the number of repairs. Mechanization also has had an impact on it. In the past, for example, to straighten a freight car it required a welder's hand and sledge hammer. Now, to straighten the freight car bodies, remote control equipment is used.

The plants introduce also, on their own, many small improvements such as the organization of a line for car repair, or in the near future, washing freight car equipment. These improvements, says the director, are in our interest. We are a self-dependent and self-financing enterprise (the ZNTK does not enter into the composition of the PKP). We virtually work on all free Saturdays. In fact, up to the end of 1982, it has been anticipated to repair about 21,000 freight cars, hence more than we planned at the beginning of the year. The statement made by the director strikes a great optimism....but the Executive Board of the Ministry of Communication realizes that the optimism is not all that is needed. Thus, the ministry calls for help to the industry producing freight cars.

#### Industry Does Not Want To or Cannot

Minister of communication Janusz Kaminski states that, (I cite the ZASTALOWIEC letter from the Off-Order Plants of the Marcelli Nowotko Metal Industry in Zielona Gora) "For many years we have been observing with disquiet that the industry has turned its back on the railway and its needs. This phenomenon has been shown by the gradual slowdown in the construction of freight cars, spare parts related to the supply, etc."

The editorial board replies, "How can one suspect for example the Zastal of turning its back on the railway, when production of coal cars in the 1970's has continued to increase from 2,400 in 1970, to 4,122 units in 1980? It is not our fault that in 1981 the PKP's interest in the coal car supplies decreased. As proof, there is a supply contract for 860 coal cars in the year 1982. As for production of spare parts for railroad cars, it is worth noting that the Zastal has been annually increasing their supply within the 10-15 percent brackets. In 1982, we confirmed, out of 56 railroad car orders that were placed by the railway, the delivery of 55 railroad cars."

"The railway emphasizes a production increase in railroad cars," says first director of the Zastal, Czeslaw Federowicz. "We are, however, conditioned by three basic aspects: steel production, the labor market, and the customers' orders. The railway, for example, has ordered roofed boxcars. In 1982, we will have delivered several dozen of these 2-axle boxcars. In making this decision we were not guided by the plant's interest, but the country's. We started the production for domestic use, at the expense of export production, which is for us more profitable. First of all, we are limited, in this case, by technical capacities and space considerations: the plant does not have room for expansion. We may increase production of coal cars, but it is dependent



on steel allocation increase and the PKP's orders. In the context of railroad car overhauls," continues the director, "the Zastal began production of the material necessary for the reinforcement of the side wall stakes of coal cars designed for the ZNTK. We do what we can, but we must be aware of realities and not be carried away by good intentions."

#### In the Supreme Chamber of Control's Estimation

The Supreme Chamber of Control has elaborated a report which illustrates the current state of the railway transport. I am citing a few excerpts of this report that has been discussed by the PAP (Polish Press Agency): "In the forthcoming years, because of a shortage of help from outside the Ministry of Communication, difficulties may reach such dimensions that the railway transport will become a major obstacle for the economy in achieving normal labor productivity. According to the NIK's estimation, all actions aimed at getting the railway transport out of impasse ought to be concentrated on the solving of three basic problems. It is necessary to improve the functioning of railway repair supply facilities, check depreciation of roads and railway buildings, as well as to bring them to normal operation conditions, and also to improve the railway management system. The technical state of railway supply, points out the report, is inadequate and unfortunately keeps worsening.... The bad technical shape of railroad cars results from their devastation by the PKP users, and frequently by the railwaymen themselves. Further, the NIK stresses that industrial enterprises, often do not implement decisions of the government presidium, which imposes upon them the repair of some segments of the railway supply. In the report a large place is given to the employment problems. In the last years, the railway has been suffering from a growing shortage of manpower. Within a 9-month period of 1982, employment in railway working divisions has decreased, in comparison to the same period of the previous year, by 10,000 people and in the railway repair shops, by 4,600 persons. Currently the railway is short 32,000 persons.

#### What To Do in This Situation?

The railway does not satisfy the needs of the national economy. It is being accused of poor labor productivity. This, however, as I attempted to demonstrate, is a half-truth. Indeed, for many reasons the PKP suffers from a shortage of production force. Also, it has to be taken into account that the railway, in the first quarter of 1982, has transported all merchandise which has been ordered. This could have been handled by the supply reserves, and particularly by the coal cars. By April and May, reserves were down to zero. The national economy was at a standstill. Now the problem is whose order should be accepted and whose should be turned down.

The Ministry of Communication, in the 3-year plan, intends to concentrate, to the greatest extent, on utilization of available resources. First of all service-repair facilities, without which one cannot work, provide annually for construction of about 50 railway platforms in areas where current repairs are being made. At the shunting stations, automatic equipment will be introduced. In order to attract more workers, the railway housing construction will be developed. In the field of transportation, a priority system is being applied.

This is a necessary evil--the most important merchandise is being transported from the producer to a given customer. There is a possibility, in such a situation, of avoiding increased use of empty railway cars. Statistically, a Polish railroad car does work several times greater than, for example, one in West Europe (to a certain extent this overutilization accounts for the growing number of the malfunctioning railroad cars).

Utilization is very intensive, but railroad cars could be utilized even better if they did not have to wait from Friday to Monday for the unloadings or the loadings. It is estimated that were the loading works not to be suspended on Saturdays, in the whole economy, the railway may have transported, in the course of 1982, about 20 million additional load tons.

In 1983 railway transport (along with road, public) is subject to an operational program. In compliance with regulations included in the program, railroad car deliveries will increase from 2,037 in 1982, to 3,500 in the current year, including 2,300 coal cars and 500 boxcars (as against 52 in 1982) for the PKP. There have also been changes as to the operational rules of the programs: a concept--guaranteed deliveries--has been introduced. Deliveries are set at such a level as to guarantee realization of the tasks provided by the program. On this basis, one can infer that the situation at the railway will be better than in 1982. Due to guaranteed deliveries there will be more fuel and electric energy, machine goods including delivery of the machine tools for tooling treatment (the Ministry of Communication received in the past year 249 machine tools and in the current year will receive 600, the bulk of which will be delivered to the ZNTK). The number of seasonal repairs of railroad cars is to increase, in relation to 1982, by 7 percent. In this situation, it is indispensable to extend and modernize existing railroad cars' repair shops and to enrich the supply bases with plants. In the current year, the national economy's demand for railway transport will increase. According to the operational plan the railway is to transport 405 million tons of merchandise (as against 390 million tons last year). It is highly likely that the needs of the economy will be greater. This surplus of needs will not be handled by the PKP. Thus, the gap will have to be filled by a strong activization of automobile transportation, particularly over short distances.

b) DOSTAWY NOWYCH WAGONÓW



a)

GOSPODARKA  
WAGONAMI  
TOWAROWYMI  
/w tys. sztuk/

c) WAGONY "CHORE" (ŚREDNIO DZIENNIE)



d) KASACJE (SKREŚLENIE WAGONÓW Z INWENTARZA)



- Key: a) Economy of freight cars (per 1,000 cars).  
 b) Deliveries of new railroad cars.  
 c) Malfunctioning railroad cars (daily average).  
 d) Scrapped cars (cars removed from inventory).

12328

CSO: 2600/647

## MINISTER DISCUSSES INCREASING OF AGRICULTURAL LAND SUPPLY

Bucharest SCINTEIA in Romanian 13 Apr 83 pp 1,3

[Article by Ion Tesu, minister of agriculture and the food industry]

[Text] Land is the most valuable asset of our people. As a matter of fact, in light of history, our civilization originated in the bond between people and land. Land served, is serving and will continue to serve as a basis for the development of agriculture, industry and the other economic branches, of villages and towns, being an essential factor for the existence and well-being of all the people. It is known that the economic activity which unfolds in the branches of agricultural production is directly tied to the existence of land, which, in its quality as a key means of production, operates in agriculture both as a means of work but also as an object of work, playing a decisive role in the system of material conditions of production. In this country, the question of rational utilization of land is a matter of national importance, whose significance and necessity have been constantly central concerns of the top officials of our party and state, who, during the course of years, have formulated measures and regulatory acts designed to ensure the best possible use of land resources and place land under the protection of law, for better management and elimination of waste involving this inestimable national wealth. This concern for the wisest possible management of land is a natural consequence of objective, specific situations, reflected, on the one hand, by the need for ensuring the food for the population, and, on the other hand, by the fact that land is limited in terms of expanse and can by no means be replaced.

In line with the objectives and tasks set by the 12th Congress and the National Conference of the RCP, by the end of this five-year plan we must obtain a sharp increase in farm output, so that agriculture may have an increasingly significant role in the overall economy and fully meet the needs in terms of agricultural food products for the population, raw materials for processing industries, and also an available surplus for export. At the enlarged plenary session of the National Council for Agriculture, Food Industry, Silviculture and Water Management, held last December, party secretary general Nicolae Ceausescu pointed out: "For this purpose, we need to proceed, in the first place, from the rational utilization of land, to completely eliminate waste, removal of land from agricultural use and any form of deterioration of arable and agricultural areas."

In light of these major needs -- which, we may say, are vital to the very progress of the national economy -- on the initiative of the party secretary general,

the National Council for Uniform Land Management was established, by Decree of the Council of State, No 397, of 1 November 1982. This broadly democratic body, which operates under direct subordination to the Council of State and which also includes the Ministry of Agriculture and the Food Industry, is destined to assure the implementation of the party and state policy on the protection, utilization, conservation and improvement of land resources. It is responsible for uniform fulfillment of all the measures relating to the protection, complete and intensive use of land, increase in the agricultural area and especially in the arable area, rise in the productive potential of land, full implementation of the national program of land improvement projects.

In compliance with the tasks set under the national program for land management, by the end of 1985 the country's arable area must amount to 10 million hectares, that is 154,000 hectares more than there were at the beginning of 1981. Achievement of this goal focuses on development of the Danube meadow and Delta and the meadows of inland rivers, and also the development of some nonagricultural areas or areas that involve lower uses or are fit for being turned into arable land. Moreover, another important source for increasing the arable area involves the land resulting from completion of projects for territorial organization by way of discontinuing some useless agricultural roads and narrowing the very broad roads, clearing the clusters of stand, shrubbery and small vineyards and orchards, which are non-cost-effective and scattered in the mass of arable land.

For the purpose of increasing the country's arable area, the county agricultural bodies and the leading bodies of agricultural units have received large investment funds and now have all they need to complete these complex projects, their duty now being to proceed in compliance with the program outlined, so that this year may see the development and conversion into arable land of another 25,000 hectares. The increase in the country's arable area will also be based on completion of additional projects, in the meadows of inland rivers and also in the counties of Romania's western regions, and specifically in the existing drainage systems, for elimination of the moisture excess, such as draining, deep loosening, and the like.

Proceeding from the fact that the possibilities for increasing the agricultural land supply are limited (we now only have 0.43 arable hectares per capita), the main avenues to increasing agricultural production involve rationally using the existing arable area, eliminating any waste of land which especially occurs as a result of withdrawal from production and soil deterioration. Consequently, measures will be taken to reduce the buildable areas of localities and to group any kinds of structures on the smallest possible area. Because large areas of land withdrawn from agricultural use were not recovered or were not returned by various users of investment funds and because there is an arrear of about 14,000 hectares of arable land, it is necessary for the ministries and the central agencies involved to take action, in conformance with the provisions of the land law, for the return of these lands to agricultural use as soon as possible. In this regard, the agricultural bodies must display greater discrimination, to the effect of no longer issuing agreements and assessments for removal from agricultural use to recipients of investment funds with arrears in terms of recoveries and returns. Moreover, approvals for removal of new areas from agricultural use will be given only in cases when equal areas were recovered on a prior basis.



Another goal related to the sensible use of land involves increasing the productive potential of land by applying complex land improvement measures. Because agricultural production is diminished as a result of the action of adverse natural factors, that year in and year out affect more or less vast areas, such as flood, excessive moisture, drought, erosion of fertile soil on slopes, years back, on the instruction of the party and state leadership, of Nicolae Ceausescu, national programs were formulated for the development of comprehensive projects of land improvement and water management. As part of these projects there were completed major systems of irrigation, drainage and soil erosion combating, which provide a strong technicomaterial base for a modern, more intensive and highly productive agriculture. During the past 17 years, the areas developed showed very great increases versus the levels for 1965: the area dammed has doubled and the area on which drainage projects were completed has increased by a factor of 3.3, totalling 2.6 million hectares; irrigation extended over 2.38 million hectares and developments for soil erosion combating increased by a factor of 7.4. All this has allowed for the continuous increase in the cultivated area, specifically the arable area, but especially the rise in per hectare outputs. Nevertheless, in light of the tasks outlined and the needs for more intensive farming, there still are large areas to be developed in all the fields of land improvement. Consequently, on the instruction of the party leadership, a uniform program was formulated for complex performance of land improvement projects, discussed and approved by the plenary session of the CC of the RCP held on 7-8 October 1982. The program ensures a more rapid rate in the completion of the developments -- including the factor of a more active participation of the population and the agricultural units concerned -- in a uniform concept, in correlation with the projects of water management and silvicultural developments within each hydrographic system. The program approved specifies development tasks that are greater than those set under the five-year plan for the 1981-1985 period and also the guidelines for long-range development of land improvement projects. The completion of these tasks makes it possible, in the subsequent 10-12 years, to finish the basic projects for the development and increase in the production capacity of the lands in all the regions affected by the unfavorable natural factors.

Under the new concept, the completion of the major irrigation and drainage systems will coincide with the resolution of the problems of improvement and putting to use of salt soils (about 450,000 ha) and of sands and sand soils (about 400,000 ha). As part of the program for combating soil erosion, the heavily deteriorated land in the hilly areas will be returned to agricultural use by terracing for vineyards and orchards, establishment of meadows, afforestation and other uses.

Based on the instructions given by Nicolae Ceausescu during his work visit to Vaslui County, relative to dissemination of the experience gained by the Perieni Central Research Station for Combating Soil Erosion in 34 counties in the hilly regions, standard areas for combating soil erosion were set up, totalling 60,000 hectares. Beginning in 1983, measures will be applied and projects for combating soil erosion will be completed on these areas, patterned upon those done at the Perieni Station, in the context of compliance with agricultural techniques to combat erosion, ensuring a rational crop structure, in conformance with the slope of the area and the stage of soil deterioration. Consequently, crops will involve strips, grassed belts, terracing and other projects for development of eroded lands, which will permit the obtaining of high outputs.



Another group of measures for increasing the production potential of the soil focuses on deep loosening of the soil, correction of soil acidity, and organic fertilization. As is known, Romania has an area of about 2.5 million hectares of agricultural lands with podzolic, salt and alkaline soils. They provide a major reserve for increasing agricultural production, if their acidity or alkalinity is corrected. Therefore, we plan to have, by the end of 1984, completed the first cycle of application of amendments on the acid arable lands, with the second cycle to be continued concomitantly with the intensified drive to improve meadows and hayfields. We assess that as a result of correction of the acid reaction of soils, combined with other ameliorative measures, agriculture can and must obtain a production surplus of at least 1 million t of grain, large amounts of milk and meat, facts which will be instrumental in the development and strengthening of agricultural units in these areas, in their greater input into the realization of the state fund.

In the context of this country, an area of more than 8 million hectares was identified in terms of lands successively affected by moisture excess and shortage. In order to increase the production potential of these lands it is necessary to perform, every 4 years, projects of scarification and deep loosening, to help improve the aerohydric system by increasing the water storage capacity and the permeability of soils with significant loaminess and high compactness. Consequently, we have planned this year to perform scarifications over 193,000 hectares and deep loosening, on 1.825 million hectares. This annual rate must assure the completion of the first scarification and loosening cycle, over the entire area, during a period of 4 years.

Moreover, we pay much attention to utilizing all the sources of organic fertilizers. This year will see the application of organic fertilizer on an area of more than 1 million hectares, using more than 35 million tons. Last winter and this spring alone saw the transportation and application of more than 14.5 million tons.

Lastly, essential factors for increasing farm outputs which must attract maximum attention include application of rational rotations, in light of the functionality of the arable land. In this regard, it must be emphasized that the production increases and the improvements in the properties of the soil, due to rotation, are obtained at no cost whatsoever. Alternating cultivation of grain and legumes provides the basis for rotation, absolutely necessary for increasing soil fertility. In all the farms, units and within the framework of state and cooperative unified agroindustrial councils, widely grown legumes include peas, soybean, lucerne, alfalfa, which ensure the proper application of rotations.

For the correct selection and application of the measures for proper management of land, for conservation and improvement of soil fertility with the aim of obtaining farm outputs commensurate with the tasks envisioned, absolutely necessary is the correct quantitative and qualitative inventory of lands, up to the level of plots, uses and ownership. Consequently, the entire country witnesses projects of quantitative cadastre, the performance of pedological and agrochemical surveys on all the agricultural areas in the cooperativized zones and in many of the other zones. Based on pedological surveys, 1981 saw the commencement of qualitative cadastral projects. The first 2 years of the five-year plan saw the performance of such projects for the area of 2.4 million hectares; it is expected that by 1985, the area will total 12 million hectares.

Hence, we have clear objectives, that were precisely defined in the unified program for the complex performance of land improvement projects; the establishment of the National Council for Unified Land Management also provided the organizational framework favorable for the achievement of all the objectives involved; we also have a superior technical and scientific potential, which ensures the possibility of exemplarily implementing the provisions of the 12th Party Congress on proper management of land, the main means of production in agriculture. It is essential for us to constantly focus on the valuable directives and guidelines of the party secretary general and mobilize ourselves in a higher degree, with all our resources and energy, to work better, in a more organized way, in a spirit of strict discipline and order, rigidly complying with the Romanian laws, so that this inestimable national wealth, the land, may be used as efficiently as possible, because it is the chief resource through which working people in agriculture can contribute to ensure the continuous progress of the economy and the improvement in the material well-being of all our people.

11710

CSO: 2700/44

ROMANIA

LABOR MINISTRY OFFICIAL EXPLAINS WORKER STABILITY PROGRAM

Bucharest SCINTEIA in Romanian 13 Apr 83 p 3

[Interview with Nicolae Nita, deputy director in the Ministry of Labor, by Corneliu Carlan: "Firm Provisions for Increasing the Stability of the Workforce;" date and place not specified]

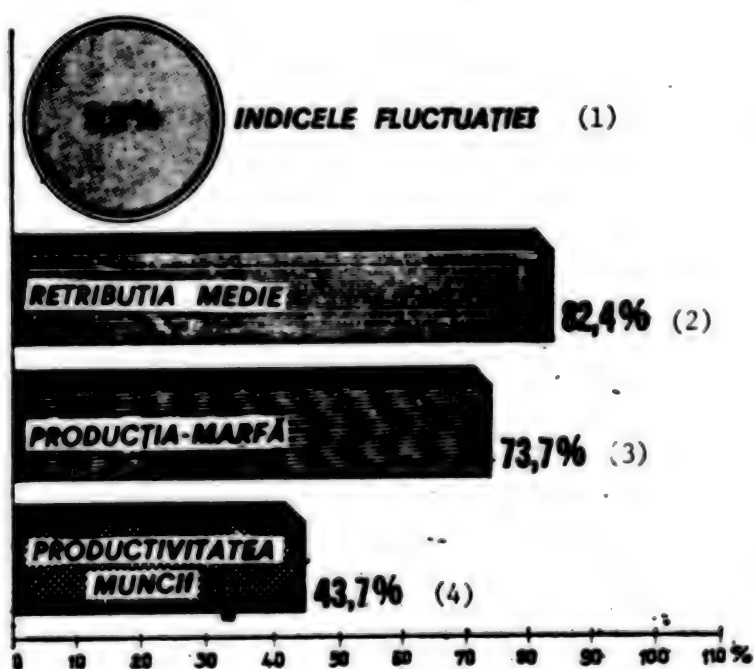
[Text] In connection with some of the provisions of the Draft Program for applying the decisions of the National RCP Conference in the field of salary payment and the distribution of incomes to the workers, specialists from the appropriate authorities are continuing to respond, in this column, to the questions sent to the editorial staff by our readers. The discussion with comrade Nicolae Nita, deputy director in the Ministry of Labor, was aimed at the measures designed to increase the stability of the workforce.

[Question] Why does the party leadership give special importance to increasing the stability of the workforce?

[Answer] Our socialist society guarantees to each citizen the opportunity to work in the field of material production or in technical-scientific or social cultural activities, in accordance with each person's abilities and training. The Constitution of Romania gives each citizen the right and responsibility to carry out useful work for society. For all citizens, work is a duty of honor and an obligation and represents the fundamental criterion for evaluating the contribution of each person to the progress of society. The socialist state has made great material and financial efforts to build and develop significant production facilities, providing jobs for all the citizens, to build a large number of housing units and social-public buildings, especially in worker centers, and to train the necessary workforce. These efforts that were made for the purpose of ensuring job opportunities for all the citizens and creating the economic basis for raising the people's standard of living, can be even more appreciated since in the capitalist world we are witnessing an increase in the unprecedented levels of unemployment and, as a result, a decrease in the quality of life there. For that reason, it is totally unjustified and damaging for our national economy to experience a trend whereby workers frequently move from their job to another job, profiting from the fact that our society has created a sufficient number of jobs which can be easily located.

We know the negative effects that the frequent, unforeseen movement of workers from one enterprise to another can have on production, labor productivity and the efficiency of the activities in the units. In addition to the fact that this brings about a disorganization of activities in the units losing the workers, it also causes additional expenses for the hiring, training and upgrade training of a new number of workers. In the graphs below, we show a comparison of the situations in two units in the same branch of the economy that have approximately the same profile. These graphs show the causal link between the fluctuations of personnel and the results of economic activities.

#### The Relationship Between Fluctuations in Personnel and the Results of Economic Activities



Key:

- (1) Level of fluctuation      (2) Average salary
- (3) Goods-production        (4) Labor productivity

In this situation, primarily due to the high level of fluctuation, labor productivity and goods-production were not achieved at planned levels and, as a result, the average salary was smaller than what had been planned.

[See next page for a comparative situation]



### INDICELE FLUCTUAȚIEI



In this case, to a good degree because of a smaller level of fluctuation in personnel turnover, activities were better organized, with the plan being exceeded for labor productivity and goods-production; as a result, the average salary was greater than what had been planned.

As can be seen, in the case of those units having a high level of turnover (the first situation in the above graphs), primarily because of a disruption of production activities caused by the movement of personnel, labor productivity was smaller than what had been planned and production was not achieved and, as a result, the average salary was smaller than the planned levels. On the other hand, in the other enterprise (seen in the second graph) where a unified work group was created and a firm work discipline established, with each person working with a spirit of responsibility for achieving his tasks, labor productivity and the production plan were overfulfilled, and the average salary was larger. Thus, it is in the interest of the economy, each separate enterprise and, certainly, each person to stabilize the situation at the place of work and to have each person integrated himself in a group where he can better use his creative potential, earn a larger salary and obtain his professional and social prestige. These are advantages that can be enjoyed by each newly hired person only over time and to the degree in which he proves himself to be a person of hope, one who is professionally well-trained and who is attached to the work and life of the group to which he belongs.

[Question] In this regard, what is meant by a person who is newly employed in a unit?

[Answer] Included in the category of personnel newly-employed in the enterprise are the young people who are for the first time entering the field of employment, either as graduates of certain forms of education and training or as persons who will get job qualification training in the enterprise. In these categories



it is normal to also have those personnel who are employed in the unit under conditions other than a transfer in the interest of employment. First of all, we are talking about those persons who left at their own initiative - resignation, persons separated from other enterprises for unjustified absences or those whose contract was broken for reasons other than ones related to their activities, and so forth. The studies that have been carried out show that the greatest levels of fluctuation are recorded among the ranks of newly-employed personnel.

[Question] What are the main provisions contained in the draft program for the purpose of reinforcing the stability of the workforce in socialist units?

[Answer] The measures designed in this regard were drawn up in the spirit of the principles of worker self-management and economic-financial self-administration, calling for the strengthening of the responsibilities of each person for the proper flow of activities in the enterprise. As is pointed out in the draft program, the workers will receive, on the basis on a contract, ownership in the property of the socialist unit where they work. And, so that each group will have the economic and legal instruments by which to stabilize the workforce, the draft program calls for the introduction of the individual contract-pledge through which relations will be regulated between the socialist units and the workers, as well as the rights and mutual obligations. Through this contract-pledge, the newly-hired workers in the enterprise will be obligated to work at least 5 years in their unit, a period during which they will be considered an associate member having a consultative vote. The associate members have all the rights outlined by law for the workers, but one-half of the amounts due them from the profit-sharing fund will be nominally deposited in the savings and loan bank, with this amount being turned over to them at the end of the 5 year period of uninterrupted work in their unit. In cases, however, where they leave this unit for unjustified reasons prior to the end of the 5 year period, they are required to repay the expenses put out by the unit for their training, as well as those made by the unit free-of-charge, and - in computing their retirement - those years worked during this period will be reduced by one-half. An important stimulative effect on stabilizing the workforce in the same unit will certainly be played by the provision in the draft program whereby there will be a noticeable increase in the uninterrupted seniority in the same unit, with the percentage of this in the structure of average salaries coming to increase from 2.9 percent, the current figure, to approximately 5 percent, an increase of over 66 percent.

[Question] In the spirit of these provisions, what obligations do you feel belong to the socialist units for providing the conditions necessary to achieve a stable workforce?

[Answer] The individual contract-pledge that will regulate the relations between the socialist units and the workers will contain the rights and obligations for both the units and the party having the contract. The collection leadership organs have the duty to provide the material, technical and organizational conditions for the full use of the workforce and the production facilities



needed to achieve the plan tasks so that, in relationship to the work that is done, there will be a guaranteed income for all the workers in the unit. Furthermore, and according to current regulations, the units must take measures for the judicious use of the workforce in accordance with the training and abilities of each person, for the training, upgrade training and multi-training of the workforce and for the permanent improvement of working and living conditions. In each enterprise there must be a healthy work environment in the spirit of socialist ethics and equity, one appropriate to the affirmation of the personality of each member of the group and to his direct, active and effective participation in the management of the economic unit.

8724

CSO: 2700/191

DECREE ON MONEY ADVANCES TO AGRICULTURAL UNITS, PRODUCERS

Bucharest SCINTILA in Romanian 16 Apr 83 p 3

/Decree of the State Council on Advancing Monies to Socialist Agricultural Units, Members of Agricultural Cooperatives, and Other Agricultural Producers Contracting to Deliver Agricultural Products to the State Reserve/

/Text/ The State Council of the Socialist Republic of Romania hereby decrees:

Article 1. The state and cooperative agricultural units, members of agricultural cooperatives, and other agricultural producers contracting to supply the state reserve with crop and livestock products benefit, on the terms provided by law, by advantageous prices, cash advances and credits, planting stock and selected seeds, fertilizers and materials to control diseases and pests, expert technical aid, and products and materials needed to produce the output contracted for, as well as other advantages and incentives.

Article 2. The socialist agricultural units and other agricultural producers are required to cultivate entirely and to make intensive use of all lands designated for crop production, to strictly observe the rules for production, circulation and use of seeds and planting stock, to perform all operations punctually and properly that are specified in the technologies for raising crops and livestock, to harvest the yields obtained, and to deliver the crop products, livestock and livestock products in the quantities, on the dates, and in the quality specified in the concluded contracts.

Article 3. The state agricultural units are required to contract for and to deliver to the state reserve the entire available quantity of crop and livestock products provided by law.

The cooperative agricultural units are required to contract to deliver to the state reserve crop and livestock products at least to the extent specified in the Plan for Regional Development of Agriculture and the Food Industry.

Article 4. The economic units contracting to procure the agricultural products for the state reserve are required, when concluding the contracts and during their execution, to verify all of the conditions for producing the crop and

livestock output and to lend the agricultural units and other producers aid in applying the production technologies.

Article 5. The economic units contracting to procure agricultural products for the state reserve may grant, on the terms of the present decree, the socialist agricultural units and other producers cash advances without interest to cover their production costs pending delivery of the products contracted for.

The cash advances granted by the units contracting to procure agricultural products for the state reserve are made available to the socialist agricultural units and other agricultural producers via the banking units and under their control.

Article 6. The cash advances granted to the socialist agricultural units and other agricultural producers are set by the economic units contracting to procure agricultural products for the state reserve on the basis of the contracts to deliver the agricultural products to the state reserve, at no more than 60 percent of the value of the products contracted for.

An advance may be increased to more than 60 percent if the state of vegetation of the crops and the state of the livestock and livestock output can ensure and exceed the contractual output and deliveries to the state reserve, upon the justified request of the agricultural units and other agricultural producers.

Article 7. Depending on the nature of the products contracted for, the cash advances are usually staggered over the main stages of performance of the operations and of obtaining the products, after the performance of the operations and maintenance of the livestock have been checked and provided that the approved technologies are applied and production is under way.

The advances are used to pay for mechanized operations, to procure fertilizers, herbicides, motor fuels, seeds, planting stock, drugs and fodders, and for remuneration for labor within the legally provided limits, amortizations, formation of funds according to law, and other production costs approved in the budget of incomes and outlays.

Article 8. The economic units contracting to procure agricultural products for the state reserve may grant cash advances to the socialist agricultural units and other agricultural producers out of their own funds and out of credits received from a bank.

For the credits received, the units contracting to procure agricultural products for the state reserve pay the banks the interest rates that the socialist agricultural units are charged, which are paid according to the production costs or out of their circulation outlays and are included in the production price or the delivery price.

The credits are granted by a bank on the basis of the contracts to deliver the agricultural products to the state reserve, provided the material conditions for producing the output and delivering the products to the state reserve have been verified both in the unit contracting to procure the products and in the socialist agricultural units and other agricultural producer units. The credits are

granted by a bank according to the production outlays made by the socialist agricultural units in keeping with the plan and the approved technologies, and according to the state of vegetation of the crops, the density of the plants, and production of the livestock and livestock output.

If the bank finds from the checks made in the socialist agricultural units and other agricultural producer units that the units contracting to procure the agricultural products for the state reserve have granted cash advances without verification of the material base and other essentials for producing the output contracted for, it will reduce or cancel the amount of credit granted and the unrefunded credits will be considered not repaid on time.

Article 9. To supplement their own funds, the economic units contracting to procure agricultural products for the state reserve may obtain credits from a bank to grant advances to the socialist agricultural units, pending finalization of the contracts and annual delivery schedules, in order to cover outlays for the next year's production, within the limits of the planned outlays for operations performed in accordance with the assigned technologies.

Article 10. If the unit contracting to procure agricultural products for the state reserve finds that the state of vegetation of the crops, the density of the plants and the state of the livestock do not ensure the output contracted for, it can reduce or withdraw the granted advances down to the level of the existing guarantees.

Article 11. The units contracting to procure the agricultural products for the state reserve recover the granted advances by directly withholding them from the sums due for the products delivered by the socialist agricultural units and other agricultural producers and from the compensations received from the State Insurance Administration (ADAS) in the case of natural disasters on the basis of transfer of the insurance benefits.

Article 12. If the value of the agricultural products delivered to the state reserve does not entirely cover the granted advance, and the socialist agricultural units and other agricultural producers deliver no other equivalent agricultural products, the difference is converted to credit, for which the units contracting to procure the agricultural products for the state reserve will charge the interest rate provided by law for credits not repayed when due.

Unrefunded credits and unpaid interest will be recovered, ahead of other obligations to pay arising from contracting for other products, out of any other cash surpluses of the units and by other legally provided remedies.

The contracts for delivery of products to the state reserve constitute court orders for the units procuring agricultural products.

Article 13. Socialist agricultural units and other producers may not use the output contracted for or the cash advances for purposes other than those stipulated in the contract.

If the obligation specified in the first paragraph is disregarded, the units contracting to procure the agricultural products for the state reserve may take measures to recover the advances before they are due, including forced sale of the existing products.

Article 14. The Bank for Agriculture and the Food Industry may grant, directly and on the terms provided by law, production credits to the socialist agricultural units in order to form stockpiles of materials, fodders and other products, and young animals for raising and fattening that are delivered in a period of more than 1 year, and also to meet some necessities strictly connected with production, provided good use is made of the production means and profitability is assured.

Article 15. The socialist agricultural units and other agricultural producers pay the bank a 0.50 percent commission for the advances received, and the bank pays the legally provided interest on the balances in bank accounts.

Article 16. On the basis of the suggestions of the Ministry of Agriculture and the Food Industry and the Department for Contracting, Procurement and Maintenance of Agricultural Products, the State Planning Committee and the Ministry of Finance will submit for approval the changes in the Uniform National Plan for Socioeconomic Development and also in the volume and structure of the state budget that result from application of the present decree.

Article 17. The provisions of the present decree apply to all contracts stipulating delivery of agricultural products to the state reserve in 1983.

Any legal provisions contrary to those of the present decree are hereby abrogated.

Nicolae Ceausescu  
President of the Socialist Republic of Romania

5186  
CSO: 2700/192



## SOLUTIONS SOUGHT FOR CONTRADICTIONARY ELEMENTS IN ECONOMY

Bucharest ERA SOCIALISTA in Romanian No 6, 25 Mar 83 pp 20-22, 46

[Article by Dr Traian Lazar: "The Factors of Value and the Contradictions in Economic Life"]

[Text] In the report presented at the National Conference of the Romanian Communist Party on 16-18 December 1982, the secretary general of the party, Comrade Nicolae Ceausescu, tackles with realism and scientific profundity the problem of the contradictions in the economic and social development of socialist Romania. "The Romanian socialist society has developed at a high rate and has reached a high level. Along with the strong growth and the modernization of the production forces, the production relations have also been improved. Nevertheless, it can be said that there is a certain contradiction between the strong development of the production forces and the development of the social and production relations, with the latter exhibiting a certain tendency to lag behind." The analysis and interpretation of the contradictions in our socialist economy are conceived as an objective, intrinsic aspect of the dialectical process of economic and social development, on the basis of the laws of the unity and conflict of opposites. The unity and conflict of opposites are complementary aspects of the determination of the structure and dynamics of phenomena of any kind, the basis for their continual formation and stability, with development and progress presupposing the constant transcending of the various opposed aspects.

One basic characteristic of the superiority of our socialist order consists of the possibility of knowing in due time the causes and the manner of manifestation of the contradictions, it being possible to act concretely to eliminate them. The report presented by the secretary general of our party, Comrade Nicolae Ceausescu, at the National Conference of the Romanian Communist Party in 1982 represents an incomparable model of scientific analysis in the problem of contradictions too.

1. In the process of the development of industrial production on the whole, a certain disproportion, /a contradiction between the processing industry and the base of energy and raw materials/ [in boldface], has also appeared. Consequently, the national party conference decided that, in the following years, action would be taken with all possible firmness to carry out the programs regarding the faster development of the base of energy and raw materials, there being harnessed all the natural resources that our country has, particularly through the wide-scale utilization of the modern technologies in the field of the extraction of petroleum, coal, ore and natural gas. Along with the growth of petroleum, gas and coal extraction, decisive



measures are provided for the development of hydropower and the new sources of power: nuclear, solar and wind power, power from hydrogen, biogas, biomass and thermal water, and others.

Of course, the rapid development of the base of energy and raw materials also has to be stimulated through the action of the value factors. Because--we must admit--the contradiction between the processing industry and the base of energy and raw materials has also manifested itself quite markedly in the way in which the value factors, such as prices, profitability, profits and so on, have been utilized.

It is known that in the extractive industry, in the primary branches, in general, and in the intermediate branches, to a considerable extent, production and delivery prices that did not cover the real production expenses were applied for a long time, with the respective enterprises and branches, in their entirety, registering losses, for which reason financing from the budget was required for continuing the activity. The efforts of the working people in these sectors were not commensurate to their value, there being absent, at the same time, the possibility of stimulation according to economic criteria, through profit sharing and so on. At the same time, in some processing sectors, big, often totally unjustified profits were registered, not due to their own efforts but due to the financing of production expenses in the primary branches from the state budget. So, for example, in 1980, while the extractive industry registered losses on the whole, the machine-building industry had a profitability of nearly 40 percent and light industry a profitability of over 30 percent, which caused the profits to be obtained, in part, without the necessary effort and the proper economic motivation. There was thus a lack of correlation, a contradiction between the production and delivery prices in the processing industry and those in the primary branches. In the speech at the plenum of the RCP Central Committee on 16-17 December 1980, Comrade Nicolae Ceausescu said that "we must completely put an end to this state of affairs," there being adopted for this purpose, as is known, in 1981 and 1981, a set of measures for updating and improving the correlation, on economic principles, of the production and delivery prices in all branches and sectors of industry. In practice, a significant increase occurred in the prices of raw materials from the extractive industry and of imported ones. On this basis, the prices of petroleum products, for thermal and electric power, and in other intermediate sectors, in metallurgy, chemistry and so on, increased. In the final processing branches, the new production and delivery prices stayed, in general, at the level of the former ones. Better conditions were thus created for making profitable all sectors of industrial activity, all industrial products, for more firmly applying the principles of the new economic mechanism.

At the same time, there occurred a slight reduction of the dispersion of the rates of profitability, of net income, between branches and activities within the national economy, responding better to the requirement of providing equal or relatively equal net incomes for equal efforts (socially necessary production expenses) in all branches and for all products. For example, while the rates of profitability in national industry according to ministries were dispersed from minus 9 to plus 38 percent in 1980, this dispersion lay between plus 8 and plus 31 percent in 1981 and between plus 6 and plus 26 percent in the following year.

Despite these improvements, as also follows, moreover, from the data presented earlier, there is still a marked dispersion between the rates of profitability calculated for costs in the two big sectors of industrial production: that of raw

materials and energy resources, on the one hand, and that of final, processed products, on the other. There is still a dispersion of the rates of profitability even between products and groups of products in the same sector. In this way, for the same material and labor effort, for the same volume of production expenses, a bigger or smaller volume of net income is achieved, depending on the rate of profitability set. This means the maintenance of a certain contradiction from this viewpoint between the prices in the respective sectors of activity.

Starting from the fact that within the objectively determined social division of labor the different activities, products and services are necessary, correspond to the social need, being established, moreover, through the plan, and the socially necessary costs for obtaining them are determined, must be determined, on the basis of scientifically substantiated standards, the dispersion of the rates of profitability cannot have an economic motivation and does not agree with the principle of economic equity required to be applied firmly, especially under the conditions of the new economic mechanism. At the same time, also to the same end, it is necessary for the rate of net income to be applied to those material and labor expenditures that represent the own effort of the producing units. So, for example, when the product is achieved through the cooperation of several units--and under the current conditions of the development of the social division of labor, very many products are obtained in this manner--it is normal and justified for the unit that assembles and finalizes the respective product to determine the net income only in relation to its own necessary labor and material expenditures and not the total cost of the product, it being known that for each subassembly the net income was calculated at the enterprise that furnished it. This is why, besides determining as rigorously as possible, on the basis of the scientifically substantiated standards, the socially necessary costs--of production and circulation--for each product and service and taking into consideration to a greater extent their technical, functional and quality parameters, the perfecting and improvement of price setting necessitate, at the same time, the further reduction of the dispersion of the rates of net income provided to be included in the prices of the various products and services in the whole economy. Taking into account the economy's potential, the level of social labor productivity, in the present case, and the situation in other countries, we consider it possible and necessary, in the process of bringing together the rates of net income in our economy, for them to revolve around the profitability of 15 percent (for the rigorously set costs).

The reduction of the dispersion, the matter of bringing together and even the tendency to equalize the rates of income provided to be included in the prices of the products in different branches and sectors do not mean the equalization of the net volume that can actually be achieved according to products, branches, subbranches and so on, since, in practice, the volume of the net income obtained depends on the amount of the actual production expenses, which can be bigger or smaller than the set (socially necessary) amount taken into account in setting the production price and, respectively, the net income. Thus, if the costs actually achieved are lower than the costs set, the net income achieved is bigger than that provided in the price, and vice versa when the actual costs are higher than those set. The price and, respectively, the costs and net income taken into account in setting it represent standards that must be as fair as possible for all producers, and the different actual results obtained in regard to the net income's volume, the profit, as a result of the own efforts of the production units, of the staffs of working people, along the line of reducing the costs, increasing the labor productivity and raising

the quality of the products and services are, must be, stimulated (or penalized) through the strict application of the value factors within the framework of the new economic mechanism.

2. In the years of socialist construction, revolutionary changes have occurred and remarkable successes have been achieved in economic and social development in all branches and sectors of the economy. On the basis of the creation of strong industry, modern agriculture has been achieved and all other branches of the national economy have been developed. State agriculture and cooperative agriculture—higher forms of agriculture—have provided for the strong growth of agricultural production, it being 3.5 times higher in the years of socialist construction than before the war.

At the same time, as was judged in the documents of the national party conference in December 1982, there have become evident a certain /disproportion and contradiction between the strong development of industry and the slower development of agriculture, which also implies a certain contradiction between the city and the village/in boldface. In general, in the process of economic and social development thus far, a certain disharmony is making itself known, a contradiction between the needs of the national economy and the population for agricultural raw materials and agricultural and food products, on the one hand, and the agricultural output achieved, on the other. The factors that have influenced the appearance of these contradictions are many and relate to various fields—that is, the technical, economic-organizational and social fields. As is well known, for a very long time, the shortcomings and disharmonies in economic and social development have been pointed out and decisive measures for remedying them have been indicated, with perseverance and perspicacity, in the party and state documents, in the speeches of the secretary general of the party, Comrade Nicolae Ceausescu. Special programs according to fields of activity, which are to provide for the further development of the national economy at a steady rate, the transition to a new quality of work and life in all fields, have been adopted and are in the process of being applied.

In the report at the national party conference in 1982, Comrade Nicolae Ceausescu stressed once again the necessity of carrying out "a decisive action to more strongly develop agriculture, to achieve an equilibrium, a suitable harmony between industry and agriculture, starting from the fact that both sectors of activity are decisive for forging socialism and communism, for increasing the general well-being of the people."

Of course, the stronger development of agriculture does not mean just the allocation of a larger volume of investments to this branch, but—perhaps above all—the improvement of their utilization in order to raise their immediate efficiency, because in agriculture, as in other branches, there are still some contradictions between the investments made and the economic efficiency achieved. I believe that we are not wrong if we say that in agriculture too a good part of the investment funds have been and are tied up in big fixed assets, in outsized zootechnical complexes, hot-houses, irrigation systems, agricultural machines and tractors and so on, which incorporate high values, but which cannot be utilized, in practice, according to the value, with the economic efficiency not being on a par with the investment effort made. However, with the same volume of investments, it would have been possible to achieve more means of production of optimum size, which would provide immediate and higher economic efficiency.



Of course, the utilization of the modern technical means in agriculture at the projected capacity and with maximum efficiency and the strict application of the advanced agricultural and zootechnical measures require the elimination of the disharmony that has appeared between the level of technical equipping and of organization of the production processes in agriculture and the professional training, the general quality of the work force remaining in this branch. In our opinion, this is, in fact, one of the most insistent current contradictions between industry, between the nonagricultural sectors, in general, and agriculture. To this there has also contributed the fact that, while the incomes in all nonagricultural sectors were guaranteed regardless of the final result in production, the incomes in agriculture, especially in the cooperative sector, as is normal, moreover, are not guaranteed beforehand, they depending on the actual results obtained in production, on the average and total outputs achieved, on the production expenses for this--that is, on the economic efficiency of the activity performed. This has constituted another contradiction between industry and agriculture, nay, moreover, between all nonagricultural sectors, on the one hand, and the agricultural sector, on the other, in general, between the urban area and the rural area, a contradiction in which the value factors and their functions and operating mechanism are directly involved. Continuing the analysis, it must be stated that the monetary incomes, which have a high percentage in the pay of the agricultural cooperators, depend on the volume and quality of the agricultural products sold, in the main, to the state supply, but also on the contracting and purchase prices set. We cannot but mention that, while in industry and other nonagricultural branches there have occurred several times, especially beginning in 1974-1975, resettings, updatings, corrections or recalculations of the production and delivery prices, which have also influenced the costs of agricultural products, the purchase prices in agriculture have stayed practically unchanged, under the conditions in which, year by year, also because of insufficient prices, losses were registered in the management of many agricultural units. For a long time, there has been a rift between the evolution of the prices of industrial products and that of the prices of agricultural products, it being considered somewhat in the "nature of things" to have greater "anxiety" about the prices in industry than about those in agriculture. And this has happened--perhaps motivated from a historical viewpoint to a certain extent--not only in regard to prices. Countless times, on various occasions, the secretary general of our party, Comrade Nicolae Ceausescu, has pointed out that "we must do away with the underestimation of agriculture....," that "there must be decisive steps to provide a suitable proportion between agriculture and industry, to do away with the contradictions between the village and the city, and to achieve as full agreement as possible, harmonious development both of industry and of agriculture, as basic, essential branches of our socialist society."

As is known, in 1981 and 1982, decisive steps were taken with regard to setting, on economic principles, the production, contracting and delivery prices in agriculture. Thus, it was arranged that, for the planned output, the prices of agricultural products would be about 30 percent higher in the 1981/1982 agricultural year than in the 1980/1981 agricultural year. At the same time, on the basis of these measures, the ratio between the prices of agricultural products and the prices of industrial products for agriculture was also improved. According to the calculation made by us during some research, the ratio between the index of the prices of agricultural products and the index of the prices of industrial products (the scissors of the prices) represents 0.85 for 1982, as compared with about 0.75 as it was in the 1977-1980 period. In the process of continually improving the correlations and structures of

prices in the economy, according to the requirements of economic and social development and having as material support the growth of the outputs and labor productivity, the ratio between the prices in agriculture and the prices in industry will tend, necessarily, toward 1, which corresponds to providing the value equilibrium between these basic branches of our economy. Of course, the true value equilibrium will be able to be only that which is based on the material equilibrium, the quantitative and qualitative growth of production, the reduction of material expenditures, of production costs, the raising of labor productivity and the growth of economic efficiency both in agriculture and in industry, in all sectors of activity.

3. The economic development of the country has provided for the continual growth of the working people's incomes, of the consumption of material and spiritual assets. This need not be demonstrated, it being fully visible and convincing to any fair-minded person. But in this field too, life and progress necessitate improvements, since, as was judged in the report presented by the secretary general of the party at the national party conference in 1982, a certain disproportion, a contradiction between the consumer demand and the production of consumer goods/ **[in boldface]**, has appeared. It is a question of the fact that for some goods, especially food, the production does not respond fully to the consumer demand—that is, to the incomes that the population can devote to securing these products. Of course, the appearance of this contradiction is due to a group of factors: the general growth of the working people's monetary incomes, of pay, in some cases, in an insufficient correlation with production and labor productivity, the existence of certain negative trends in consumption, the maintenance, for a long time, of retail selling prices not correlated with the real production and circulation expenses, and so on. However, the cause of the causes consists of the level and quality of the production of consumer goods. Consequently, the solution to the problem resides not in toning down the growth of the incomes of the working people but in providing this growth on the basis of the real material production and its volume and quality. Incomes can be however big if they result directly from production, if they correspond to a bigger and higher-quality output. Before the general assembly of the working people at the "23 August" Enterprise in the capital on 22 February of this year, Comrade Nicolae Ceausescu emphasized: "Everyone must understand that incomes can be even 110, 120, 150 and 200 percent, but in relation to the output achieved."

The socialist society is built on the principles of social justice and equity, with exploitation and oppression in any form not being allowed, but this does not mean the leveling of incomes. Consequently, one of the key problems of development consists of the stimulation of production, of each working person's interest in producing as much as possible and in obtaining, on this basis, as high incomes as possible.

Socialism creates the premises for the unprecedented growth of production and social labor productivity, presupposes a wealth and abundance of material goods, but they cannot be obtained without labor, without encouraging the working people to produce and, in relation to the results obtained, to have as high incomes as possible. "Through his labor," the secretary general of our party said at the close of the proceedings of last year's national party conference, "anyone can earn and—so to speak—can enrich himself. Certainly, an enrichment based on his own labor, not on exploitation!" In the spirit of the same principles, the socialist society cannot guarantee to anyone, not even to any extent, incomes without labor, not even 80, not even 70, not even 50 percent. Only the results obtained in production can give the measure of the guaranteeing of incomes.

The program for applying the decisions of the National Conference of the Romanian Communist Party in the field of payment for labor and of distribution of the incomes of the working people, subject to approval by the plenum of the RCP Central Committee and to public discussion, has in view the firmer promotion of the socialist principle of distribution according to the quantity and quality of labor, with each working person's remuneration and incomes having to reflect the contribution made to fulfilling the production plan. No one can receive pay, can have a guaranteed income or share in profits, if he does not produce in accordance with the obligations at the workplace.

Of course, when we refer to the results obtained in production, to the output obtained, as a measure of the incomes and earnings of the working people, we have in mind a useful output [remainder of sentence omitted].

The growth in production and labor productivity is also reflected in the growth of the real incomes of the population by means of the retail selling prices. It is a law that relatively low prices can be applied only under the conditions of high labor productivity and a real abundance of products. Without these conditions, the use of low prices, at variance with the concrete production conditions, can cause the appearance of negative economic phenomena. So, for instance, under such conditions, some producers in the rural area, particularly in the vicinity of the urban centers, felt that it is more advantageous to buy food from the city than to obtain it on their own farms. The manifestation of such phenomena, contrary to the real requirements of the economy, necessitated the taking of a group of steps, synthesized in the Program Regarding Territorial Self-Management and Self-Supply, for the providing of agricultural, food and industrial products and of services to the population in the 1982-1985 period, approved by the national party conference. The essential factor for meeting well the consumer necessities, as well as the plan for deliveries to the state supply, consists of attaining the stipulated agricultural outputs, of strongly mobilizing all the units in agriculture, including the farms of the population in all areas, to fully utilize the existing resources in order to increase the volume and quality of the agricultural and food products--a sure condition for raising the standard of living of the population.

The matter of carefully studying, of deciphering and of thoroughly knowing the objective causes, as well as the subjective ones, of the appearance and manifestation of contradictions in our socialist economy and of devising on scientific bases the measures for eliminating and preventing them constitutes the realistic way to conceive things, the force that, in fact, transforms the contradictions from an obstacle into a factor that stimulates economic and social development, material and spiritual progress. The 12th congress and the national conference of the party adopted--as is known--measures and objectives of historic importance for developing socialist Romania to higher levels.

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## TOURISM MINISTER DISCUSSES PREPARATIONS FOR 1983 SEASON

Bucharest SCINTIA in Romanian 12 Apr 83 pp 1, 3

[Interview with Comrade Nicolae Gavrilescu, minister of tourism and sports, by Constantin Priescu: "Romanian Tourism—a Reflection of the Country's Beauties, of Our People's Hospitality"; date and place not specified; passages enclosed in slant-lines printed in boldface]

[Text] The time for summer vacations is approaching. How have the organizers of tourism in our country prepared for the summer vacation season, how have they acted so that this year too, before the domestic and foreign tourists, Romania may do credit to its capacity of host, so that Romanian tourism may be a mirror in which the country is seen to the full, with its beauties, with the great achievements of an industrious and talented, hospitable and friendly people, as are the Romanian people? In order to learn as many details as possible about the way in which touristic Romania will present itself in 1983, we addressed a few questions to Comrade Nicolae Gavrilescu, the minister of tourism and sports.

[Question] In the foreign press, at the fairs and expositions in which it participates, Romania is called one of the countries that proudly bears the title "a country of tourism." To begin with, please present a few of the arguments that lead to this merited judgment.

[Answer] Romania fits among the international touristic values as a country with a real bent for tourism. Due to—and we say it with pride—its treasure of natural and spiritual beauties. We have a country recognized in the world as beautiful, with a generous, special nature. A country with a varied and picturesque landscape, unspoiled and enriched by a series of original values: historical and art monuments, a rich and well-preserved folklore, folk art of unsuspected refinement, to which are added, as a crown, the great achievements in the construction of socialism.

Set firmly into the international touristic circuit, /our country has demonstrated that it possesses all the conditions for the development of multilateral tourism/ that offers to Romanian and foreign tourists a wide and varied range of vacations: /marine tourism/, in the modern resorts on the seashore, with all the benefits of heliotherapy, thalassotherapy, sapropelic mud and mesothermal sulfur springs; /alpine tourism/, in a large number of resorts, a creation of the past years, in which

winter sports and hiking are practiced in the pure air of the Carpathians; /tourism on circuits/, with Romania being, from this viewpoint, a country that offers itself to vacationists as an amphitheater of all the requests by travelers; /cultural tourism; motor tourism; tourism for studies; tourism for socioprofessional visits/; and, last but not least, /tourism/—perhaps unique in Europe—by travelers for studies, recreation, fishing and hunting /in the wonderful Danube Delta/ and so on.

However, there is one element that contributes the most, through continuity and efficiency, to defining Romania as a country of tourism. This is /balneal tourism/, represented by about 160 spas of national and local interest—over 20 of them entering the circuit of international tourism long ago. What gives Romania a great attraction in this field is the fact that the treatments in our spas are applied to a wide range of ailments from which modern man suffers.

[Question] This multilateral touristic potential has been and is being utilized due to the continual concern of the leadership of the party and state for creating and modernizing the material base needed for receiving tourists. Is this base capable, at present, of satisfying the demands of not only domestic but also international tourism?

[Answer] "A leisure-time industry," "a source of physical and spiritual regeneration"—as tourism is called—it has gotten and is getting in our country special attention from the leadership of the party and state and personally from the secretary general of the party, Comrade Nicolae Ceausescu. Substantial and continual efforts have been and are being made to develop it. In the last 20 years, due to the strong development of the material base for tourism, which is concretized today in modern facilities, Romania has become one of the prized touristic destinations. The investment of about 5 billion lei in each of the last three 5-year periods has led to the achievement of /a housing capacity of over 300,000 places in hotels, motels, inns, villas and small vacation houses/, and over 40 percent of this capacity—that is, over 120,000 places—has been built on the sunny coast of the Black Sea. The entire material base for tourism, created in the years of socialist construction by our architects and builders and spread harmoniously throughout the country, responds to the requirements of Romanian and foreign tourists, is functional, through its structure, and meets the demands of Romanian and foreign tourists of various social categories and with various incomes.

[Question] Admittedly, not even tourism has been safe, and cannot be, from the effects of the world economic crisis. What steps has the management of the Ministry of Tourism taken and does it plan to take later so that, this year too, Romania may have further a good "touristic custom"?

[Answer] The crisis existed and exists. Its effects are seen and are well known everywhere in the world. Despite the crisis, tourism remains a "magnet" that always attracts people. In 1982, over 6 million foreign tourists visited Romania and benefited from the services of its material base—it is true, a somewhat smaller number than in the previous year. As regards domestic tourism, it even experienced an increase, by 5.5 percent, in comparison with the previous year.

This year, we are concerned with carrying out better the tasks established in the decision of the party leadership in March 1978 /with regard to developing exchanges with other countries in the field of tourism, which has caused us to expand the

geographical area of the destinations of origin of the tourists who come to Romania and to make our varied touristic offer known in as many countries as possible and on practically all the continents/. In 1983, the most tourists will come, as happens all over the world, from the neighboring countries, from the socialist countries, with which we maintain permanent relations, finalized in touristic exchanges, carried out under mutually advantageous conditions. Many foreign tourists who will visit our country come--this year too--from the other European countries, particularly the FRG, France, Greece, England, Italy, Spain, Belgium, Holland, Switzerland, Austria and Scandinavia. In addition, we are also registering arrivals of foreign tourists from countries on other continents: the United States, Canada, Israel, Japan, Jordan, the United Arab Emirates and Egypt.

/In tourism too, the year 1983 will have to fit into the framework of the requirements of quality and efficiency formulated by the party leadership/. We will act with all possible determination to bring to Romania as many foreign tourists as possible--the chief source of economic efficiency in this sector of activity. But big responsibilities, in providing an active flow of tourists throughout the year, in using as efficiently as possible the material base created by society, also devolve upon us with regard to stimulating tourism with Romanian citizens. The Ministry of Tourism, as a principal holder of the material base, as well as the other bodies with responsibilities in this field--the UGSR [General Union of Romanian Trade Unions], the UTC [Union of Communist Youth], UNCAP [the National Union of Agricultural Production Cooperatives], the Ministry of Education and Instruction, the Ministry of Health, the Ministry of Labor and other bodies and ministries--we have the obligation to concern ourselves systematically, as the regulations in force stipulate, with staggering the vacations of the working people over the whole year, with organizing as pleasantly as possible their leisure time on the weekend. Because we must not forget one thing. The state has made huge material efforts to create a material base meant to satisfy as completely as possible such justified demands of the working people and we must use it properly.

[Question] The unanimous judgments that are made about the hospitality of our people are well known. Beyond a doubt, tourism is a reflection of this trait. What steps has the management of the Ministry of Tourism taken and will it take to provide high-quality services in all the units and on all the routes that will receive tourists?

[Answer] The slogan under which this touristic year is unfolding is the following: "The quality of the services is measured in deeds, and we will prove it with deeds." This is a slogan that came into being as a result of analyses with all the main categories of professions that participate in providing services for tourists. Within the preparations that we have made for the current summer season, we replaced the analyses "in a global system"--which brought to the "debating table" nearly all the professions in tourism and which, in this way, did not offer the possibility of a detailed and efficient analysis of the entire flow of tourists. However, in preparing for this season, separate and thorough analyses were made with the tourist guides and agents, with the hotel administrators and receptionists, with the heads of public food service units, cooks and operational workers. We have under preparation--and we will carry it out before the start of the season--an analysis with the basic personnel who participate in carrying out recreation. The slogan that I stated is the result of the unanimous decision that was reached by our personnel in the basic links of tourism--those who coordinate directly or perform services for

tourists. We have also taken the step of carrying out an intensive program for updating the professional knowledge--by the start of the summer season--of all the directors of the county offices of tourism, so that, to a greater extent than up to now, they may be the main initiators in exercising the control over the quality of the services performed in the tourism units, over the efficiency of the entire economic activity.

Another guarantee of improvement in the quality of the services also consists of the fact that the executive bureau of the management council of the ministry analyzed the way in which the preparation of the main touristic bases of the country for the summer season was done on the spot, in the field. Such was done in the case of the seashore, such will also be done with other resorts, including the municipality of Bucharest, which is the second-biggest touristic base of the country at present.

Clearly, along with the measures for preparing the material base down to the smallest detail, with a view to good functionality, we have put the main accent on training and improving the training of the personnel. This year, about 6,000 personnel have improved their professional knowledge within the Ministry of Tourism's Center for Training and Improvement of Personnel, and another 60,000 workers have updated their professional knowledge within programs that were prepared with the help of the center and carried out under the leadership of the personnel with the most responsibility in the county offices of tourism. We have also manifested the same concern for training a corps of guides (about 6,000 guides)--for Romanian and foreign tourists--who have a direct contribution to properly carrying out the programs with Romanian and foreign tourists. If we add that in 1983 we will organize more entertainments and more varied ones, more excursions and itineraries for tourists, short-term "schools" for the learning of handicrafts specific to our country and of Romanian folk dances by foreign tourists and that we will increase the number of folkloric restaurants, of discotheques and bars--with programs of better quality and with longer business hours in comparison with past years--we offer an even more complete picture of the fact that, /this year, we have prepared ourselves to receive tourists better, to offer them as pleasant vacations as possible/. In other words, tourism must fall into line with the increase in quality requested by the leadership of the party and state, must be in step with the other economic and social activities performed by all the working people in our country.

12105

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## SUCCESS OF EFFORTS TO INCREASE COAL PRODUCTION STUDIED

## Equipment Use, Quality Control Urged

Bucharest REVISTA ECONOMICA in Romanian No 12, 25 Mar 83 pp 4-5

[Article by Vasile Boescu: "Coal and Power"; passages enclosed in slantlines printed in boldface]

[Text] The past few years have brought, on a world level, a reconsideration of coal's place among the power-producing resources. Extensive geologic studies for finding new reserves have been and are being made, highly productive installations are being used in the operations, and the quantities of coal extracted have grown and are growing rapidly. Coal successfully replaces hydrocarbons and, for the time being, is one of the main fuels for which there are considerable reserves.

In our country, the orientation toward the development of coal production antedates the onset of the world energy crisis. The special programs adopted by the 12th party congress and the national conference provide a considerable increase in coal production and, on this basis, the economization of a significant amount of hydrocarbons in power production. "The fulfillment of the programs set up," it says in Comrade Nicolae Ceausescu's speech at the Work Conference of the RCP Central Committee with Management Personnel, Specialists and Workers in the Mining Industry and Geology, "presupposes good organization in all the mines, both underground and in quarries, but also the opening of new mines in order for us to be able to have the necessary work front. We must provide ourselves a reserve of about 10-20 percent with regard to the work front, so that we may have the certainty of fulfilling under any conditions the plan for ore and coal production, as we have stipulated."

## A High Rate of Growth of Production

The energetic actions and steps taken at the start of this year, especially after the Work Conference of the RCP Central Committee, have caused a new spirit in all the extractive sectors, it being concretized in the daily growth of production. In the concrete case of coal extraction, as a result of applying the new work program and organizing better the activity in the mines and quarries, the average daily output has risen considerably. In the few weeks of work under the new conditions, daily outputs of 140,000-150,000 tons of coal have been achieved, as compared with about 130,000 tons usually. In the week of 14-20 March of this year, the average daily output reached 152,000 tons.



The results obtained in the whole extractive industry and particularly in the coal industry have confirmed fully--as, moreover, it was also judged at the recent session of the Political Executive Committee of the RCP Central Committee--the efficiency of turning to the application of the new program of work in three 8-hour shifts, an action that has caused better utilization of the technical base on hand and of the worktime, and the organization of production and labor closer to the greater demands of the activity in mining. The qualitative leaps made in this regard, especially at the coalfields in Jiu Valley and the Oltenia Basin, are significant. In comparison with the former situation, when they worked 6 hours per shift, under the new conditions, when the miners work 5 or 6 days per week and the mine operates 7 days per week, in the whole /Jiu Valley Combine, for instance, the labor productivity at the faces equipped with big mechanized complexes has risen from 6.26 tons of coal per post to 8.54 tons of coal per post/. Under such conditions, the output of coal extracted with each mechanized complex has risen on the average per day from 320 tons to over 370 tons.

The Motru and Rovinari Mining Combines have also obtained high outputs, much better than in the corresponding period of last year, which has permitted the daily coal deliveries to the thermoelectric power stations to be hundreds of tons higher. Positive judgments must also be made about the remarkable activity that is being performed by the miners of the Ploiesti Combine, in the Mehedinti, Voevozi and Salaj mining enterprises, who, daily, are extracting and are furnishing to the economy hundreds and thousands of tons of coal over the plan.

Consequently, the marked increases in coal production show constant progress, capable of permitting, this year, the attainment of a level closer to the economy's requirements, in order to satisfy better the needs of the thermoelectric power stations, the iron and steel industry and the population.

Clearly, as is also natural, the growth of the quantities of coal has had and is having a positive influence on the growth of power production on this basis. Thus, /in January and February of this year, 14.4 percent more electric power was produced with coal than in the same period of 1982/. Moreover, while, last year, some sets in the thermoelectric power stations had to be stopped periodically for lack of fuel--that is, coal--in the 2 months of 1983, all the generating sets functioned continuously, not one had periods of stoppage. It is also worth noting the fact that /in the period that has passed in 1983, the consumption of hydrocarbons in the production of electric power has also dropped/. The power produced with the contribution of hydrocarbons dropped 5.5 percent in comparison with last year, a drop that could have been even bigger if it had not been necessary to cover the deficit in power from the hydroelectric power stations.

There is, as it is possible to note, a direct connection between the level of coal production and the level of power production. If it is taken into account that, this year, new sets (Turceni, Giurgiu, Borzesti, Zalau, Drobeta-Turnu Severin, Tismana and so on), whose daily coal consumption totals about 22,000-25,000 tons, will go into operation in the power industry, the coverage of this need and of that of the thermoelectric power stations in operation requires the mobilization of the mining units to an even greater extent to attain during the coming months a level of at least 160,000-200,000 tons of coal extracted and delivered daily. With such a supply, the activity of the thermoelectric power stations will be better, with the amount of electric power achieved by each set approaching the level set.

### High Indices on Each Piece of Equipment

Following the course of the activity in the coalfields, it must be said that the efforts must be aimed with priority in the direction of /utilizing with higher outputs the mechanized complexes on hand and providing new work fronts both underground and in quarries/.

The progress achieved, especially in the fields in Jiu Valley and at Motru, in raising the indices of utilization of the mechanized complexes and the rotor and bucket excavators shows strikingly the growth in the efficiency, in the labor productivity per employee. But the big reserves for more efficiently utilizing all the mechanized means on hand are also evident. While, for instance, at the Lupeni operation the labor productivity on the faces with mechanized complexes has risen from 8.64 tons per post to 12.85 tons per post and the daily advances have risen from 0.7 meters to over 1 meter, at the level of the Jiu Valley Combine the average obtained is lower by nearly 3 tons per post in coal extraction and 0.4 meters in advances. If we relate this difference to the number of mechanized complexes that the combine has, the quantities of extracted coal less or the number of meters not done, it results that just by raising the indices of utilization of these big pieces of equipment to the level attained in Lupeni, it is possible to achieve monthly an increase of tens of thousands of tons of coal, along with making advances by some tens of meters.

The same thing also holds true in the case of the operations in mines and quarries of the Motru and Rovinari combines. The matter of utilizing with high indices all the mechanized means, and especially the rotor and bucket excavators, the mechanized complexes and the face combines underground, can influence positively the growth of the productivity per post, the considerable growth of the daily coal output. "Let us take steps," it says in the speech of the secretary general of the party at the Conference of the RCP Central Committee with Miners and Geologists, "to use rationally, at full capacity, the equipment that we have. This presupposes steps to organize the activity well, to provide good maintenance—thus, of the maintenance equipment too—spare parts and subassemblies, considering that it is not easy to put the equipment underground and to remove it. Let us prepare the equipment in such a way as to change whole subassemblies, so that the entire period of replacing subassemblies is as short as possible, to be able to ensure that the machines work continually."

Several /new work fronts/ were prepared recently—at the Tehomir mine of the Motru Mining Combine, at the Rosia Pesteana enterprise, at the Rovinari mining enterprise, at Lupeni and Cimpul lui Neag, in Jiu Valley and so on. Unfortunately, things are not going particularly well in this regard. There are investments lagging behind from previous years, which have not been finalized yet, so that the existing work fronts, as they exhaust their deposit, cannot be replaced with others of corresponding or bigger dimensions. It is necessary to reach the situation in which the preparations constantly provide in advance one to two new coal faces at each operation.

Potential reserves exist, but their utilization requires a concentration of human and technical forces, the performance of the different activities in conformity with the timetable, the daily pursuit of the advances or the baring work, the taking of prompt steps where the situations call for them. In particular, it is necessary to speed up the investment work for opening up new coal faces at the Rovinari and Motru CM's /Mining Combines/, in Jiu Valley and at the other big operations.

A big contribution to increasing the efforts of the miners must also be made by the machine and equipment builders, who have the duty to comply with the delivery dates for the spare parts and the new mechanized complexes stipulated in the contracts. There still are unjustified arrears in delivery, as well as possibilities of raising the qualitative performances of some of the equipment and complexes that are produced. The providing of all the conditions needed for carrying out a continuous coal-extraction activity, at high levels, with coal faces prepared in advance, is an essential condition so that the tasks may be fulfilled at the level of the provisions. This is why the responsible factors at the level of each operation, of the combines and of the respective ministry must devote full attention to putting the new capacities into operation on schedule--a condition of the greatest importance for maintaining high rates of coal extraction.

#### In a Direct Relationship: the Quality of the Coal and the Quantity of Power Produced

One essential condition in the process of the production of power through the utilization of domestic coal consists of /raising its power/ to the caloric value stipulated in the plan. At present, there are cases when the coal delivered to the thermoelectric power stations by the operations in Jiu Valley and the Oltenia Basin lies 200-300 kilocalories per kg below the provisions.

Naturally, the failure to reach the quality levels has a number of repercussions: the consumption for producing a kilowatt-hour of electric power rises, more rock and dirt are transported by railroad, with automotive means or on conveyor belts, the power-production expenses rise, difficulties appear in the technological flow for coal utilization and so on. Concretely, in the period of January-February of this year, due to the lower coal quality, the power producers consumed 1.9 kg of lignite and 0.76 kg of bituminous coal per kilowatt-hour of electric power, as compared with 1.8 kg of lignite and 0.73 kg of bituminous coal in 1982. The repercussions also resulted in a high consumption of subassemblies in the mills (little hammers). To all these things are added the stoppages of the equipment for preparing the coal for burning (especially of the mills), all ultimately influencing the rational and efficient utilization of the electricity-generating sets.

In order to be able to understand better the relationship between the quality of the coal furnished and the power produced, we give a few examples. At the Mintia-Deva thermoelectric power station, a steady supply of coal (bituminous coal) with a caloric value of 3,300 kilocalories per kg, under the conditions of utilizing three to four mills to prepare it for burning, can provide for the almost complete utilization of the capacities, with a power production of 190-200 megawatts being achieved. Under the current conditions, when the average of the coal supplied does not exceed 3,100-3,150 kilocalories per kg, also using three to four mills to prepare it (the worsening of the quality entails frequent derangements and misadjustments in the mills and, consequently, downtime), the power that is obtained barely reaches 160-170 megawatts. Bearing in mind that the installed load in a thermoelectric power station is 6 by 210 megawatts, the utilization of fuel (that is, coal) with calories below the average set in the plan, besides not providing for the achievement of the quantity of power, also causes high wear on the installations and marked growth in the costs per kilowatt-hour obtained.

The situation is even more difficult in the case of the thermoelectric power stations at Rovinari and Turceni, where the variation in the caloric value of the coal



(lignite) is greater. The use of coal below the stipulated qualitative parameters leads to incomplete utilization of the load of the electricity-generating sets, with a direct effect on the level of the production of thermal and electric power. This explains the fact that, although the installed load at the two thermoelectric power stations is high, the fulfillment of the power-production program does not reach a suitable level at present. The situation entails studies and measures in consequence.

It is clear that the efforts to obtain power by utilizing coal can be efficient in proportion to the providing of the planned caloric value of the fuel. What are the solutions that could be taken under consideration?

/More careful preparation of the exploitable coal faces/. This presupposes within the quarries the correct performance of the baring operations, by eliminating to the utmost the falls of dirt. Unfortunately, sometimes the haste to put the new coal faces into operation in the quarries leads to the failure to remove layers of 10-15 cm of dirt and occasionally more, which, in the case of operating with rotor excavators, gets mixed in with the coal, increasing the percentage of impurities.

/The matter of removing on separate belts the rock resulting from advances in the underground operations/. It is known that along with the growth of the degree of mechanization of the extraction of coal its quality worsens, since the mechanized complexes cannot distinguish the falls of rock from the falls of coal. But a valuable contribution to eliminating big quantities of rock can be made by organizing a separate belt for transporting it in the case of carrying out heading work. At present, both the rock and the coal are transported and deposited on the surface by the same belt--without it being possible to do the sorting of them any longer.

/The improvement of the activity in the coal-dressing stations/. There are three big coal-dressing stations in Jiu Valley, to which two more will also be added this year. Considering that the operations that they perform must have as an effect the elimination of the rock and the reduction of the consumption of ash and moisture--in short, the providing of suitable quality both for coke production and for power production--their activity is of great importance and responsibility. In these sectors, however, they sometimes go more on quantitative achievements to the detriment of quality. The matter requires analyses followed by concrete steps. On the one hand, the improvement of the selection installations and, on the other, the raising of the responsibility of the staffs that perform their activity in these sectors. It is necessary to reach the situation in which each car of coal delivered conforms to the planned quality levels. Therefore, it is necessary to strengthen the order and discipline in these sectors, along with exercising strict control over the quality of the coal delivered, right from shipping it.

/Since thermoelectric power stations are under construction or modernization in many areas of the country, it would be desirable for the new installations to be adapted to burning coal with a caloric value corresponding to the reserves that the country has/. This would help to avoid some of the difficulties with which the thermoelectric power stations are now faced. The researchers, designers, geologists and thermopower producers can contribute equally to selecting the most efficient solutions in this regard. It is also necessary to speed up the activity of modernizing the mills for preparing the coal for burning at the thermoelectric power stations, by adopting the types with rollers in lieu of those with small hammers. Experience

confirms that the latter are more durable and, at the same time, have a longer life and greater efficiency.

/The plan targets in the mining operations and the payment for the coal furnished should be set not in physical tons but in tons of conventional fuel/. Such a measure would be apt to also mobilize the efforts of the miners in the direction of raising the coal quality.

#### Achievements in Jiu Valley Reported

Bucharest SCINTEIA in Romanian 19 Apr 83 p 2

[Interview with Dan Surulescu, director general of the Jiu Valley Mining Combine, by Sabin Cerbu: "The Miners in Jiu Valley, Strongly Involved in Raising the Production of Coal"; date and place not specified; passages enclosed in slantlines printed in boldface]

[Text] [Question] More than 2 months have passed since, on the instructions of the party leadership and, personally, Comrade Nicolae Ceausescu, the application of the new work program in mining was undertaken. What are the first conclusions that are drawn from the activity of the miners in Jiu Valley?

[Answer] First of all, I would like to stress the particular importance of the measures established at the Work Conference of the RCP Central Committee with Management Personnel, Specialists and Workers in the Mining Industry and Geology on 29 January of this year with regard to developing the energy base and utilizing better and increasing the production of mineral raw materials, for fulfilling the provisions of the 12th party congress and achieving the country's energy independence. /The implementation of the special programs drawn up after the conference has caused a substantial improvement in the use of the technical base on hand and of the work-time, a better distribution of the work force according to posts and, in consequence, an increase in the production of coking and power coal/. We can thus state with complete certainty that the first conclusions after applying the new work program in mining are gratifying, with the results obtained by the mining units within the Jiu Valley Mining Combine experiencing a climb upward.

[Question] Please refer to some of the achievements obtained.

[Answer] With the transition to the program of work in 3 shifts of 8 hours per day, /an organizational framework suited to underground work has been provided at all 10 mining enterprises of the combine/. As a matter of fact, optimum conditions for carrying out the production cycles specific to underground work have been created, the intensive and extensive indices of use of the equipment, especially the mechanized complexes, have risen, the number of posts that extract coal has grown and the horizontal and vertical transportation of coal has been improved. As a result of the steps taken after applying the new work program, /over 1,000 workers, engineers and other personnel in the auxiliary activity have been assigned to directly productive workplaces/, and the action is continuing. The improvement in the organization of labor, the increase in the number of posts on the faces, where the fate of production is decided, and the strengthening of order and discipline are concretized in /the growth of the labor productivity on the mechanized faces from 8.5 tons per post, which was obtained before, to 10.35 tons of coal per post at present. The



average output per complex has risen from 354 tons to 420 tons of coal and the degree of utilization of the coal-extraction installations is 21 percent higher than it was last year/, with the Petrila, Lupeni, Lonea, Paroseni and Aninoasa mines, in particular, distinguishing themselves by the results obtained. These things would be, in short, the explanations for /overfulfilling the production plan for the third quarter by over 20,000 tons of coal/. At the same time, as a result of the steps taken, the economic efficiency of production has also risen. Thus, /the consumption of pitwood has been cut by over 10 cubic meters per 1,000 tons of coal, and the consumption of lumber by 0.3 cubic meters. At the same time, the consumption of electric power has been lowered from 50 kilowatts to 45.3 kilowatts per ton of coal extracted/.

**[Question]** This year and, in prospect, over the whole 5-year period, tasks of great importance in increasing the production of coking and power coal devolve upon the miners in Jiu Valley. What steps are being taken to fulfill the plan provisions in the ensuing period?

**[Answer]** In 1983, 11.8 million tons net of bituminous coal, including 3.3 million tons for coke and semicoke, must be extracted in Jiu Valley. For achieving this output a special accent is being put on doing on schedule and even beyond the provisions the work of preparing and opening up the new extraction fronts, on putting the new faces into operation and on expanding the mechanization. I would mention the fact that in the geologic and opening work we intend to achieve a significant volume of labor in advance. In the immediately following period, new mechanized complexes will be introduced at Petrila, Livezeni, Aninoasa and Paroseni, and the high-yield method, which was promoted right by the miners in Jiu Valley, of the artificial resistance roof will be extended to the Lonea, Aninoasa and Vulcan mines. We are concerned further with extending to all the mines the positive experience accumulated in Lupeni with regard to raising the indices of utilization of the high-yield mechanized complexes and the face and heading combines. We have the conviction that, by properly taking care of the mechanized complexes and using them at full capacity, the labor productivity can rise even more. This is proved by the top crews at Lupeni, Uricani and Paroseni, where 12-16 tons per post are obtained with the mechanized complexes. At present, a number of technical and organizational measures for improving the transportation of the coal from belowground to the surface are also in the process of being carried out. At Lupeni, a shaft with a skip is under construction and at Aninoasa, Vulcan and Barbateni, the transportation is being improved in order to eliminate the stoppages. We are devoting special attention to the Aninoasa and Livezeni mines, where, due to difficulties encountered in placing the proper number of posts in the coal and due to shortcomings in the organization of labor and the use of mechanization, the anticipated results are not being obtained. In a short time, through the steps that we will take, the situation will be rectified there too.

**[Question]** The miners and dressers in Jiu Valley have extremely mobilizing targets with regard to raising the production of coal for coke. How is action being taken to attain this objective?

**[Answer]** The proposed objectives refer to achieving a mining mass of 14,000 tons per day, which would go to the dressing plant in Lupeni, to improving the quality of the coal extracted and to removing from the mining mass as big a quantity of coke as possible. At Lupeni, where the biggest quantity of coking coal—over 7,500 tons per

day--is extracted, the plan provisions are fulfilled and even overfulfilled regularly. At Uricani, the second high-yield mechanized complex--1,000 tons of coal per day--was recently put into operation. At Barbateni, as a result of the steps taken recently, the production plan is being fulfilled. Decisive steps are also being taken to improve the quality of the extracted coal by properly performing the bucking operation, by separating the common flows of belts underground and by performing the technical quality control at the three mines where coking coal is extracted. In the preparation of coal in Lupeni, a special accent is being put on the possibilities of recovering as big a quantity of coking coal as possible from the mining mass by utilizing the installations better. For completely taking over and washing the extracted coal, the operating time of the washing lines and the cableway for removing the rock will be increased. At the same time, the selectivity in washing the coal between 14-80 mm will be increased by putting into operation a new washing line and the screens with rotary control rods.

In closing, I want to stress the determination of the miners in Jiu Valley to utilize all the advantages of the new work program in mining, to act without cessation, with their entire skill and experience, to fulfill, day by day, the plan for coal production and thus to respond with deeds to the fiery appeals expressed by Comrade Nicolae Ceausescu to give the homeland as big quantities of coking and power coal as possible.

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## ETHNIC STRUCTURE AT PRISTINA UNIVERSITY

Pristina JEDINSTVO in Serbo-Croatian 24 Mar 83 p 2

**[Text]** Mihailo Todorovic, delegate of the Federal Committee of the Assembly of Yugoslavia, raised a question at the meeting of the Federal Committee which relates to student enrollment and the departure of teaching cadres from the university in Pristina, and the establishment of cooperation in the scientific plan between it and the university in Sofia.

Borisav Krajina, member of SIV **[Federal Executive Council]** and federal secretary for justice and the organization of the federal administration, today answered the question.

At Kosovo University in Pristina, SIV's Borisav Krajina started out by saying: classes are conducted in two or even three languages: Albanian, Serbo-Croatian, and in Turkish to small groups. At this same university, enrollment is carried out based on a language of instruction quota which now amounts to 4:1 in favor of Albanian versus Serbo-Croatian. The decision regarding quotas and ratios are given before each school year by the Kosovo University Council. To determine the ratios, the council takes into consideration: the number of students who have finished secondary education, and the structure of the population of the Federal Autonomous Region of Kosovo. A total of 40,139 students study at Kosovo University in Pristina. Of this, 24,329 are regular students and 15,810, part-time. The national composition of the enrolled students is as follows: Albanian, 31,228 or 77.6 percent, Serbs 5,285 or 13 percent, Montenegrins 1,249 or 3.1 percent, Turks 202 or .5 percent, others 2,038 or 5 percent and foreign students 191 or .4 percent. A total of 5,314 students from outside Kosovo study at Kosovo University in Pristina, and of that number, 1,327 Serbs and 1,090 Albanians, a total of 2,417, come from the rest of Serbia.

From the SR Macedonia are 66 Serbs and 1,617 Albanians, for a total of 1,683; from SR Montenegro 587 Montenegrins and Serbs and 510 Albanians--a total of 1,096. From the rest of Yugoslavia, 8 Albanians and 110 others--118 total.

Data concerning enrolled students appears as such: in the Natural Sciences-Mathematics Faculty--Albanian instructional language 370, Serbian 126, total 496; in the Technical Faculty--Albanian instructional language 232, Serbian

99, total 331; in the Mining-Metallurgical Faculty--Albanian 283, Serbian 70, total 353, in the Physical Culture Faculty-- Albanian 13, Serbian 3, total 16; in the Economics Faculty--Albanian 315, Serbian 321, total 636; in the Law Faculty--Albanian 107, Serbian 271, total 376. Hence, according to the language of instruction at the university, 1,320 are enrolled in Albanian, 870 in Serbian, 2,210 total.

The effort to decrease by 30 percent the number of students in the so-called unproductive faculties is planned in both languages of instruction for the next 1983/84 year. The present plan to decrease the enrollment of regular students is as follows: the 1980/81 school year 28,400; the 1981/82 school year 26,040; and the 1982/83 school year 24,329.

Presently the level of registration of an unacceptable number would be less than 20 enrolled students per class according to the Law on Higher Education in the FAR Kosovo, so that in individual groups, despite this, instruction is organized in Serbo-Croatian even if three or four languages are registered. There are branches, for example, for physics and mathematics in the Natural Sciences-Mathematical Faculty. There are 15 such groups with less than 20 students at this university.

In three sections of the School for the Higher Education of Workers in Urosevac, despite the quota for instruction in Serbo-Croatian, which numbers 30, not one student has registered for the 90 free places.

Kosovo University in Pristina in the last 2 years has dismissed 21 teachers or associates. At the same time 47 new teachers and associates for instruction in Serbo-Croatian have been admitted through elections to the university. At the university there are a number of permanent open competitions for the selection of teachers and students in Serbo-Croatian.

Kosovo University in Pristina, said Krajina, is actively cooperating with the Association of Yugoslav Universities and the SR Serbia. It cooperates directly with many universities in Serbia, primarily with Belgrade, Nis, Skopje and Kragujevac. Bilateral cooperation has been initiated with universities in Ljubljana, Rijeka, Tuzla, Titograd, Sarajevo and other university centers. A number of teachers from some of these universities hold regular classes at Kosovo University; 64 from Belgrade University, 17 from Nis, 23 from Skopje, 11 from Sarajevo-11, 6 from Zagreb-6, 3 from Kragujevac-3 and one from Tuzla-1. Around 500 young scientific and educational workers from Kosovo University have received training at Yugoslav universities.

Kosovo University in Pristina, Krajina further said, has signed an agreement of exchange of science professors with the following foreign universities: Japan, Sofia, Rome, the political institute in Jena and in Romania. There is also an agreement with the Kliment Ohridski University in Sofia by which exchange of science professors will take place for 42 days per year in order to give lectures and exchange experiences. During 1982 this university used this quota so that Sofia University had one teacher from the Law Faculty, two from the Economics Faculty, two from the Natural Sciences-Mathematics and

one from the Technical Faculty in Pristina. This exchange is carried out within the framework of the program for cultural cooperation between the Governments of the Bulgarian People's Republic and Yugoslavia. Five other Yugoslav universities cooperated with Sofia University, said Borisav Krajina.

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June 3, 1983